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# Railway Age

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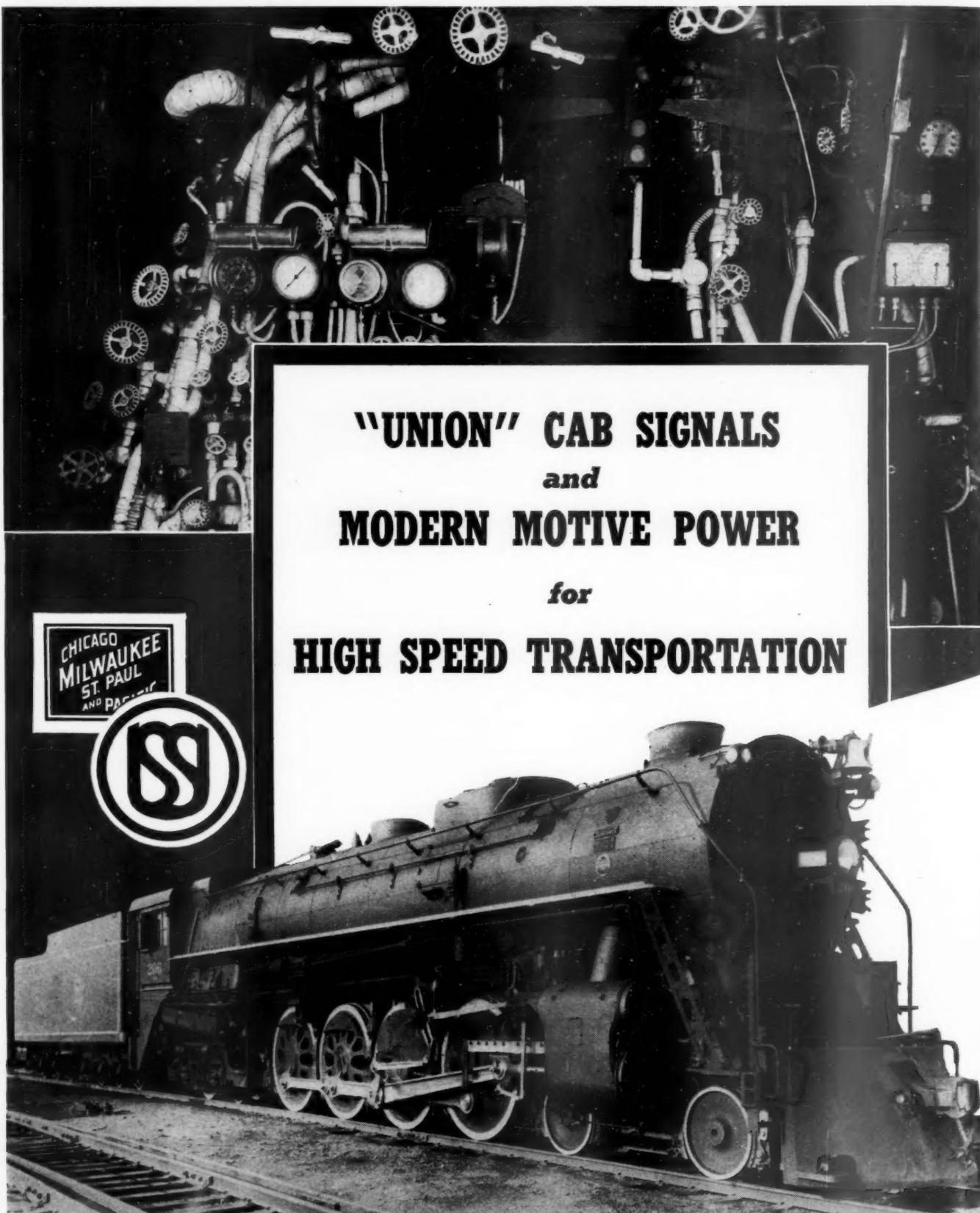
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**"UNION" CAB SIGNALS  
and  
MODERN MOTIVE POWER  
for  
HIGH SPEED TRANSPORTATION**

**UNION SWITCH & SIGNAL CO.  
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# No Solution for Railroads Which Ignores Labor Relations

D. B. Robertson, president of the Brotherhood of Locomotive Firemen & Enginemen, in the April issue of that organization's journal, takes us sharply to task for the editorial "Labor Relations Machinery That Promotes Injustice and Discord" which appeared in our February 26 issue. In that editorial we charged that friendly co-operation between railway employees and managements was being "largely frustrated by labor politicians who apparently feel that more is to be gained by raiding the railroads than by co-operating with them." We stick to that statement—and repeat it as our principal answer to Mr. Robertson's criticism.

### We Said "Raiding"—and We Meant It

The railways are in a desperate situation, and the union leaders know it as well as anybody. Imagine their pressing for passage of the make-work train limit bill at such a time! Mr. Robertson, of course, calls the bill (acted on unfavorably recently by the House Committee on Interstate Commerce) a safety measure—but everybody who knows anything about it, including the union leaders, knows that it would have no effect on safety save to diminish it.

We used the word "raiding" advisedly in connection with a certain class of cases the unions have taken before the National Railroad Adjustment Board. The kind of cases we had in mind were those in which large amounts of "back pay" are involved, to which the claimants are entitled—if at all—on the grounds of some technicality rather than of common sense justice. In this connection we cited the notorious award of \$250,000 of back pay to Lehigh Valley trainmen—representing a day's extra compensation over a period of many months to these men for each terminal movement of a train between Pennsylvania Station, New York, and the coach yard. Mr. Robertson questions our statement that "a clearly worded working rule provided for an extra hour's pay for this service." Well—here is the working rule we referred to, and if Mr. Robertson can read any other meaning into it than that the L. V. trainmen were entitled to one hour's pay for each of these yard trips, then let him do it:

Road conductors and trainmen required to do switching or

make separate delivery of trains in initial or final terminal yards will be allowed time consumed with a minimum of one hour in addition to their assigned trip.

### Legal or Illegal—It Still Is Unjust

But we did not attack this award, alleging primarily that it was illegal. Legal or not, such payments are indefensible from any standpoint of common sense fairness. As a matter of fact, nobody knows whether the referee awards of the National Railroad Adjustment Board are legal or not—for the simple reason that the unions threaten a strike whenever a railroad shows a disposition to get one of these referee decisions into court by the only means there is of so doing, i.e., by refusing to pay the award and requiring the employee to sue for it. Mr. Robertson says the unions have never taken a Board decision unfavorable to them to court. That contention proves nothing, because money moves in only one direction in these Adjustment Board cases, i.e., from the railroad to complaining employees. If employees lose a case, they do not have to dig up and pay. If they win, their gains are "velvet." Any group who would create the precedent of taking appeals from a tribunal which can, and frequently does, give it money but cannot take its money, would be pretty stupid.

Mr. Robertson says that by "custom and contract" there is a sharp differentiation between train service and yard service. We are glad he brought that up, because it is precisely upon that point that the referees' interpretations of yard and train service rules, or the rules themselves, or both, reach the nadir of absurdity. It used to be the "custom" for people to ship their freight largely by rail—and as long as that "custom" continued the railroads could afford to maintain the "custom" of providing yard crews to do all terminal switching. But business has fallen off at many small terminals the country over, leaving insufficient work to keep a yard crew busy 24 hours out of the day. At many such points, as a perfectly justifiable measure of economy, the managements have pulled off yard crews and required train crews to do necessary switching. The train crews are paid additional compensation for the time thus spent—but does that satisfy the unions? It does not. They demand the restoration of yard crews,

with compensation for the time they have not been working—and in many cases they have secured it.

No railroad management would pull off a yard crew if there were enough work to keep the crew reasonably busy. But when a railroad, under present conditions, is forced—as is often the case in the way the agreements are interpreted—to employ men whose services are *not* needed, it simply means that they have to furlough other employees whose services *are* needed. Every yard crew on duty where there is not enough work to keep it busy more than half the time means, probably, four or five section men or equipment mechanics laid off, who otherwise would have jobs. And that is why we contend that the kind of conditions the unions have forced on the railroads promote discord rather than harmony. How "co-operative" will a shop mechanic—ready and willing to work 8 hours for 8 hours' pay—feel when he is laid off to enable a railroad to pay a couple of thousand dollars to some trainman or yardman for work he did not do? How "co-operative" would the trainman or yardman feel toward the shopman if their positions were reversed?

#### Old Timers Worked for Their Wages

Mr. Robertson appears to regard "custom" very highly—and there is every reason why he should be expected to, since if ever there was an outmoded custom which benefited the participants, it is that of paying train and engine service employees by the mile on a basis of speed which has long been ancient history; and of awarding them all kinds of "constructive mileage" and various other arbitraries on top of their already generous wages. Says Mr. Robertson:

When I went "firing" we handled a typical freight train of 35 to 40 cars with an engineer and fireman, a conductor, flagman and brakeman, a crew of five men. We made 10 miles an hour or so, and arrived as we could. An engine weighed 100,000 to 150,000 pounds upon drivers, not 500,000 pounds, as many do now, and railroading was simple enough.

Today our men handle up to 150 cars with a crew of five and receive relatively less pay for two or three times the responsibility, risk and anxiety. Today we are delivering freight trains, the revenue of which is worth three and a half times as much as it was a few years ago.

When Mr. Robertson says, "We made 10 miles an hour and arrived as we could," he means that he was paid 100 miles' pay for 10 hours' work, or vice versa, and he probably could truthfully have added that he was paid by the hour almost as frequently as by the mile. In other words, he worked for his wages. But when he speaks of "two to three times the responsibility, risk and anxiety" of present day train service over that of a generation ago, we wonder whether he really is serious. The safety of railroad employees today is three times as great as it was in 1913 (one death for each 498 employees in 1913, and one death for each 1,495 in 1936). Today's big engines, most of them with automatic stokers and power reverse gear, are far easier on the engine crews than much smaller power used to be. As for train crews—25 years ago when

there was a hot box out on the line, the train crew changed the brass. When a draw-bar pulled out, the train crew chained it up. If a knuckle broke, they put in an emergency one. Today they do none of these things. Improvements in signaling have increased the personal safety and lessened the responsibilities of practically every train and engine service employee on every up-to-date railroad in the country. A generation ago freight train crews on the average usually worked 10 hours for a day's pay. Today they work 6 hours on the average—and often far less.

*Better machinery has made the lot of every man on the railroad a far easier one than it was a generation ago. And now the unions—whose members are the chief beneficiaries of this self-same machinery—demand that the people who put up the money for this machinery be in large measure deprived of the ownership of their property.*

#### Does Useful Capital Deserve No Wage at All?

The above is, in simple language, the essence of the demand that the remedy for all the ills of the railroads be sought in "writing down" their capitalization. Some such "writing down" there must be, of course—and it is already provided for in bankruptcy proceedings involving approximately one-third of the railway mileage of the country. Where railway plant has become obsolete, it follows that the securities which cover it must suffer a parallel decline in value. But why, in addition to suffering this loss, should the security owner also be asked to assume, by "writing down" his investment, a host of other liabilities—the failure of the Interstate Commerce Commission to maintain rates at a level to conform to commodity prices; the encroachments of subsidized competition; and organized labor with wage demands growing faster than the industry's ability to pay them?

Aside from the question of the adequacy of the rates prescribed by the Interstate Commerce Commission, there are three important factors which have contributed to the present critical condition of the railroads. These factors are:

1. Obsolescence of some railroad plant occasioned by the greater efficiency of competing agencies of transportation for some tasks (such as truck transportation for very short hauls, for instance).

2. The competition of subsidized rivals, whereby railroads, while actually more efficient than their competitors, are made to appear less efficient—and thus lose the business—by reason of their rivals' subsidy (such, for instance, as barge transportation on the New York State Barge Canal and the Mississippi and Ohio rivers).

3. The rapid increase in railroad labor costs, which has paralleled a rapid advance in wage rates and working conditions for employees, particularly those in train and engine service.

Invested capital must always take the risk of being superseded by new investment of greater productive

efficiency. Hence, we doubt whether anyone would question the justice of calling upon railroad security-owners to assume the losses which arise from genuine obsolescence. So there is little, if any, controversy upon that point. The differences of opinion arise entirely in the second and third of the factors named above, i. e., in the extent to which railway rivals are subsidized and the extent to which the railways may be overpaying their employees.

#### **Mr. Robertson and We Disagree on One Point Only**

Concerning the second point, that of subsidized competitors, we doubt that there is much disagreement between ourselves and Mr. Robertson. In his attack upon us he states that "rail workers have joined the roads in numerous attempts to put this competition" upon an equitable basis. But it is important to bear in mind that, on the question of what is and what is not fair competition, the railroads and their employees are not both the judge and the jury. Instead they have to plead their case before outside authority. So there is hope, as time goes on and the regulatory tribunals, the legislatures and the public understand more fully the questions involved in unfair competition, that that portion of railway difficulties which arises from subsidized rivals may be resolved.

There thus remains but one important issue upon which Mr. Robertson and we disagree—and that is the matter of the justice of present wages and working conditions, and in particular those of train and engine service employees. We have already shown in the above that employee safety is three times as great today as it was a generation ago, and that the hours a train crew put in to earn a day's wages average about 40 per cent less. We have cited specific physical improvements which have been made which make the work of both train and engine employees easier than it was 25 years ago. It is true that the number of tons of revenue freight per freight train increased by more than 50 per cent from 1913 to 1936, but that was obviously due to the greater capital invested in the railroads, which provided larger engines and other improved equipment. If a justification for higher wages for freight service can be found in the increased tons per freight train, then it logically follows that no increase can be justified for passenger service employees, because the number of passengers per train in 1936 was almost exactly the same as it was in 1913.

#### **"No Man May Be a Judge in His Own Cause"**

We could cite such figures at length, but to do so would serve no useful purpose, because *the labor unions are, in effect, both the judge and the jury when questions arise which affect their wages or working conditions.* They can electioneer among railroad employees. Managements cannot. They have political power. Managements have little or none. When the unions go out

after a wage increase, there is no objective evaluation of the justice of their claims. No impartial body weighs the facts of their claims of increased efficiency or of rising costs of living against the claims of the shipping public and security-owners who also should have some consideration in the distribution of railway revenues. The only criterion of judgment in a wage dispute is—not the justice of union demands—but whether it would be cheaper to accede to them than to risk a strike. Similarly, nobody knows whether the costly decisions the Railroad Adjustment Board has been rendering are really legal or not—for the simple reason that strike threats prevent taking these cases to the courts.

If Mr. Robertson is as certain as he appears to be of the justice of the present status of wages and working conditions in railroad service, then he surely cannot object to having these conditions examined by an impartial tribunal. If he is convinced of the fairness of the awards of the Railroad Adjustment Board, then he cannot fear the consequences of appealing contested cases to a recognized court of law. Surely there is nothing in the present rule of superior force (in the settlement of new demands) or of unreviewable kangaroo court proceedings (to settle claims under existing rules) which entitles the Railway Labor Act to the respect he pays it.

Mr. Robertson took six pages in his magazine to recount our sins. We cannot devote so much space to answering him, but we have endeavored to meet squarely what appear to be his main contentions. We doubt, however, that such issues as this will be settled by the contending parties. They require impartial and disinterested judgment from the outside—and neither railway security-owners, nor railway managements, nor the shipping public can be assured of justice under the present set-up which fixes railway wages and working conditions without regard to their claims.

#### **Co-operation Can't Come When Some "Co-operators" Are Hog-Tied**

To Mr. Robertson's question as to whether or not we speak for railroad management, we can assure him that we speak only for ourselves. We may add, however, that commendatory letters received from many railway managers following our publication of the editorial he criticizes show that, in writing as we did, we gave voice to a point of view which is maintained by a number of the outstanding leaders in the railroad industry. Moreover, if Mr. Robertson will turn to the Communications page in this issue he will see a letter from a locomotive fireman which shows that *Railway Age* reflects the views of at least some of the members of his own organization more accurately than Mr. Robertson's policies reflect them.

The answer to the railroads' difficulties, as Mr. Robertson contends, will be found only in "increased co-operation by everybody." But "everybody" includes not only managements and employees, but also secur-

ity-owners and customers. There cannot be "co-operation by everybody" or even any real co-operation between management and employees as long as labor leaders continue to take the position that railway security-owners have no rights that management and employees are bound to respect.

Management does not own the railways. It is employed by and represents the owners, and is bound by every obligation of law and honor to fight in the last ditch to defend the owners' property rights. As long as government and labor assume that the Railway Labor Act is a law merely to maintain peace on the railways, whatever the cost to security-owners, that act must continue to be, when management does its duty, a breeder of injustice or constant discord.

## Paid for Work Not Done

In the monthly bulletins of the Interstate Commerce Commission entitled "Wage Statistics—Class I Steam Railways," there are given some figures which should be of interest to the public at present.

In the bulletin for January, 1938—the last available—under the heading "Compensation—Time paid for but not worked," appear the following figures:

Executives, officials and staff assistants.....	\$26,390
Professional, clerical and general.....	833,339
Maintenance of way and structures.....	36,833

Maintenance of equipment and stores.....	480,356
Transportation (other than train, engine and yard).....	84,421
Transportation (yardmasters, switch tenders and hostlers).....	50,605

The foregoing figures for "Time paid for but not worked" total \$1,511,944.

Employees in train and engine service are paid on a mileage basis. There is another caption in the bulletin that reads "Transportation (train and engine)—Miles paid for but not run." The total compensation of road train and engine employees in January was \$28,857,292. Of the total mileage they were paid for, 10 per cent was included under "Miles paid for but not run"—from which it appears that they were paid about \$2,886,000 in January for "miles not run."

The figures for both "Time paid for but not worked" and "Miles paid for but not run" total about \$4,398,000, or 3 per cent of the total payroll of \$148,253,000 in January.

The January figures forecast a total payroll in the year 1938 of \$1,850,000,000. If 3 per cent of that is for "Time paid for but not worked" and "Miles paid for but not run," as it doubtless will be, then the total amount chargeable in 1938 to "Time paid for but not worked" and "Miles paid for but not run" will be about \$55,500,000.

The foregoing figures may help indicate to the public one reason why some students of railway affairs believe that working rules—or rules for not working—as well as wage levels have become important on the railways.

## "These Calves Should Be Weaned"

It is interesting to read the published suggestions of the President's advisers for easing the railroad pain. Insofar as I read not one seriously proposes to correct the main trouble which is too many calves sucking the railroad cow. Outstanding of these are the organized labor unions and the local taxing units. A tremendous saving could be made by paying railroad labor according to what it is worth to the shipping and traveling public rather than a wage scale out of all proportion to service rendered. If a man works he is entitled to adequate and just compensation. On the other hand if his services consist only in filling up space he should be remunerated accordingly.

To illustrate: On the Santa Fe there is operated on a branch line of which I have knowledge a daily passenger train which pays its conductor over \$200 per month for six days' work. This conductor eats his breakfast at home, makes his daily trip and is back home for the mid-day meal. His train carries a few pouches of mail, a little express and possibly 50 paying passengers a month whose average fare would not be \$1.00. Other members of the crew are paid in proportion. I submit they are not worth their salaries. Yet they are paid the same hourly wage as men on busy, fast and profitable trains.

The Santa Fe has tried repeatedly to relieve itself of this loss but the regulatory body has each time refused its plea. Every town served by this particular branchline train is adequately served by busses and trucks and the towns use the highway transportation service yet protest each time a move is made to discontinue rail service. If the rails are to be forced to furnish service in cases such as this some provision should be made by law to regulate the costs, of which labor is a main item, according to the worth of that service. This is not an isolated case for

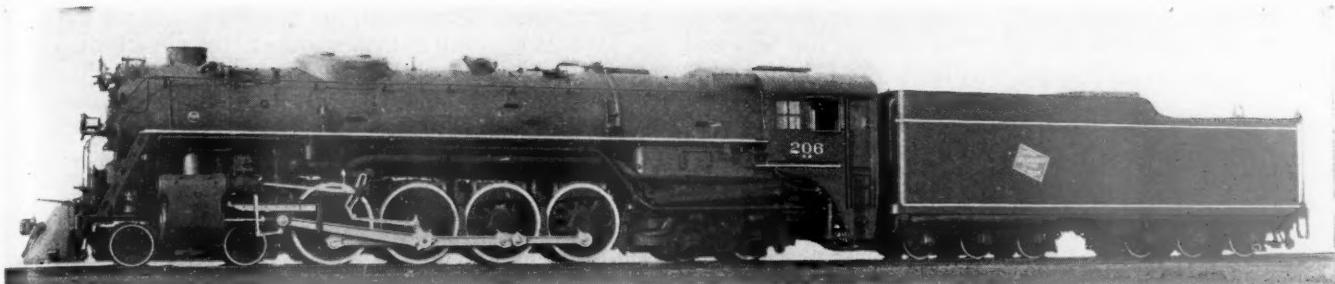
there are numerous branch lines on every railroad system in the same class as this particular branchline, lines once very necessary and profitable to the system but owing to changing times no longer necessary. Railway labor should recognize this and permit their men to be paid accordingly and if they will not they should be compelled by law.

As to the local taxing units: There is on the Santa Fe a nine mile stretch of branchline of which I have first hand knowledge. In years gone by this furnished the only means of transportation for the community it served. Now the line is paralleled by a paved highway over which move busses and trucks on frequent and convenient schedules, serving the community much more efficiently than the railroad ever did or could. The Santa Fe sought to abandon this stretch of line but again the regulatory body refused its plea, giving as its reason that the Santa Fe was a prosperous road and a little loss wouldn't hurt it. Back of this refusal could be seen the power of the local taxing units such as the school districts, etc., traversed by the line who sensed a loss of revenue from taxes. This particular calf has sucked long enough and ought to be weaned.

Back of every protest against abandonment of service and lines in the interest of cutting operating costs and maintenance charges can be seen all the local Chambers of Commerce who just want the trains to keep running financed by someone else, so in case they should happen (just happen, understand) to want to use the service it would be there. No feeling of obligation to help support it by using its facilities.

What are the railroads for, anyhow? Surely their only use should be to transport freight and passengers efficiently at the lowest possible cost and not to support government.

*From a Letter by A. M. Foss, Pauls Valley, Okla., in the Wall Street Journal.*



A 4-8-4 Type Freight and Passenger Locomotive Built for the C. M. St. P. & P. by the Baldwin Locomotive Works

## Freight and Passenger Power for the Milwaukee

Baldwin delivers thirty powerful 4-8-4 type locomotives  
with 74-in. driving wheels

**T**HE Chicago, Milwaukee, St. Paul & Pacific has received thirty 4-8-4 type locomotives from the Baldwin Locomotive Works. These are designed primarily for freight service, but will also be used to some extent in heavy passenger service. They develop a tractive force of 70,800 lb.; the driving wheels are 74 in. in diameter, and the cylinders are 26 in. by 32 in. They carry a boiler pressure of 285 lb. per sq. in.

These locomotives will be assigned in freight service between Bensenville, in the Chicago district, and Council Bluffs, Iowa, and between Bensenville and the Twin Cities. They will release 55 locomotives of the Mikado type which will be assigned to other districts and, after further reassessments, will ultimately result in the scrapping of 17 units and placing 54 in reserve.

These locomotives will also be used in passenger service between Minneapolis, Minn., and Harlowton, Mont., during the season of heaviest passenger travel. The 4-6-4 type locomotives regularly assigned in this service are limited to 12 cars on the Olympian schedule. The new locomotives, which are expected to handle 18 cars without difficulty on the same schedule, will eliminate double heading or the necessity of running the train in more than one section. Since the peaks of passenger and freight service come at different seasons, neither service interferes with the other in the assignment of the locomotives to both.

The use of the new locomotives has involved some additional expenditures for strengthening bridges and installing longer turntables, lengthening enginehouse stalls, and improving shop facilities. Including these expenses, the new locomotives are expected to earn a return of at least 12 per cent on the investment.

### The Foundation and Running Gear

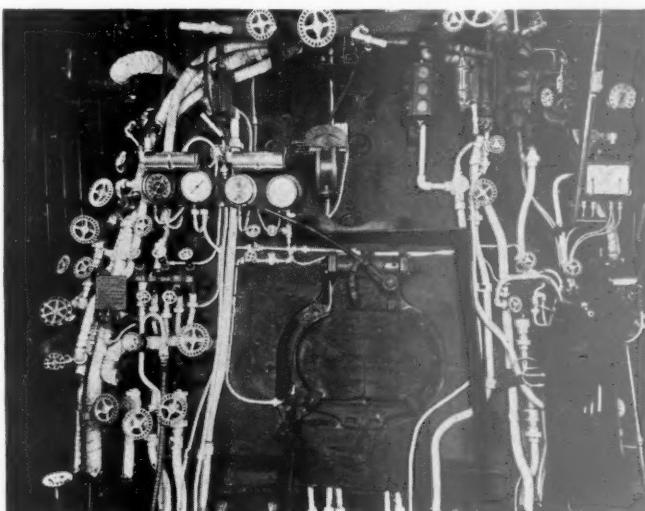
The General Steel Castings beds of these locomotives include the cylinders and integral back cylinder heads. Main reservoirs are also an integral part of the backbone of the casting and attachments are provided for the air compressors, the headlight generator, the hot-water feed pump and reverse gear.

The pilot consists of a cast-steel frame to which steel plate is welded. It is secured to a vertical wall at the front of the engine bed and is built so that the sloping surface extends from a point well above the deck to the bottom of the pilot. When not in use the folding coupler is tipped up and back and a skirt with which it is fitted completely closes the opening in the pilot. A smooth, unbroken contour is thus provided which is said to have proved quite effective in clearing snow from the track.

The driving wheels are Bokpok cast-steel centers and the journals have Timken roller bearings in one-piece housings. An Alco lateral-motion device is fitted on the front driving wheels.

The main and side rods are of low-carbon nickel steel. There is a complete installation of floating bushings on the crank pins with Hunt-Spiller fixed bushings in the rods. The knuckle pins are of nickel steel.

The total weight of reciprocating parts on each side is 2,287 lb., of which 39.5 per cent is balanced. This



In the Cab of the C. M. St. P. & P. 4-8-4 Type Locomotive

produces a calculated dynamic augment at 74 m. p. h. (diametral speed) of 11,285 lb. in each of the first and main wheels; 12,311 lb. in the third wheel, and 11,490 lb. in the fourth wheel. Revolving weights are cross-counterbalanced in the main wheels.

The engine truck is the General Steel Castings Company four-wheel equalizer type with inside Timken roller bearings. These trucks are fitted with the constant-resistance centering device. The Commonwealth Delta type four-wheel trailer trucks have the American Steel Foundries roller-bearing units on both axles. The engine-truck wheels and front trailer wheels on part of the locomotives are the Davis one-wear cast steel; on the others, Standard one-wear rolled steel. The rear trailer wheels are cast-steel centers with steel tires.

The cylinder and valve-chamber bushings are of Hunt-Spiller gun iron. The piston heads, of rolled steel, are fitted with Hunt-Spiller gun-iron bull rings and outside packing rings, with bronze inside packing rings.

The guides and crossheads are of the multiple-bearing type. The guides are attached to the cylinder heads with the Slid-Guide expansion support.

The valves are built up of light cast-steel spiders with Hunt-Spiller lightweight bull rings and sectional packing rings on the outside, and bronze rings inside. The piston-rod and valve-stem packing is the T-Z Diamond Crescent type. The Walschaert valve motion provides a valve travel of  $7\frac{1}{2}$  in. The reverse gears on half of the locomotives are Baldwin and on the other half Alco.

### Lubrication

Each locomotive has two force-feed lubricators. On the right side is a Nathan Type DV5 26-pint lubricator which is lagged. This lubricator takes care of the cylinders, the valves and the stoker engine. On the left side of each locomotive is an unlagged 24-pint, five-feed lubricator, with four-way dividers from each feed, which lubricates the guides and the driving-box shoes. These lubricators are Detroit's on half of the locomotives and Chicago's on the remainder. Air-compressor and turbo-generator lubrication is furnished by a Westinghouse force-feed pump lubricator.

Alemite fittings are applied on the rods and valve motion, the brake rigging, spring rigging, truck pedestals and center plates, the furnace bearers, and numerous other bearing or wearing surfaces on the locomotive and tender.

### The Boiler

The boilers are of the conical-connection type. The barrel courses and welt strips, and the roof and side wrapper sheets are of silico-manganese steel. The inside firebox is of welded construction throughout. There are two Nicholson Thermic siphons in the firebox and one in the combustion chamber.

The flexible stays are the Alco type. These are applied in the four top rows below the crown stays on each side of the firebox and in the two vertical rows each, immediately adjoining the back head and throat sheet. There is a complete installation of flexible stays in the combustion chamber, and the first six transverse rows of crown stays back from the tube sheet are Alco expansion stays. There is a complete installation of flexible stays in the throat sheet, except in the top and bottom rows, and they are also applied in the two outside rows around the back head. On five of the locomotives the short rigid staybolts are made of hollow Mayari steel.

These locomotives are fitted with Firebar grates,

which provide 20 per cent air openings, and are fired by a Type B du Pont Simplex stoker, the engine of which is mounted in the left front corner of the tank. The boiler equipment includes the Barco low-water alarm, the Wilson sludge remover and Superior flue blowers on both sides of the combustion chamber.

The tender tank design on these locomotives required that the hot well of the Wilson feedwater heater be located about half way back in the tank instead of at the usual location in one of the front corners. The hot well in the new location on the left side of the tender holds approximately 1,000 gallons of water, from which the two-stage centrifugal pump feeds the boiler. To reach the new location the 6-in. exhaust-steam return line is carried over the top of the tank. The additional length of exposed pipe, together with the fact that three sides of the hot well are exposed to the temperature of the

**Principal Dimensions and Weights of the C. M. St. P. & P.  
4-8-4 Type Locomotives**

Road	C. M. St. P. & P.
Builder	Baldwin
Type of locomotive	4-8-4
Road Class	S-2
Road numbers	220-229
Date built	1938
Service	Freight and passenger
Rated tractive force engine, 85 per cent, lb.	70,800
Weights in working order, lb.:	
On drivers	282,320
On front truck	87,800
On trailing truck	120,330
Total engine	490,450
Tender	397,000
Wheel bases, ft. and in.:	
Driving	19-3
Engine, total	47-4
Engine and tender, total	96- $\frac{1}{2}$
Driving wheels, diam. outside tires, in.	74
Cylinders, number, diam. and stroke, in.	2-26 x 32
Valve gear, type	Walschaert
Valves, piston type, size, in.	14
Maximum travel, in.	7 $\frac{1}{2}$
Boiler:	
Steam pressure, lb.	285
Diam., first ring, inside, in.	90 $\frac{8}{16}$
Firebox length, in.	150
Firebox width, in.	102 $\frac{1}{4}$
Combustion chamber length, in.	72
Arch tubes, number and diam., in.	2-3
Thermic siphons, number	3
Tubes, number and diam., in.	66-2 $\frac{1}{4}$
Flues, number and diam., in.	201-3 $\frac{3}{4}$
Length over tube sheets, ft.-in.	21-0
Fuel	Soft coal
Stoker	Type B, duPont Simplex
Grate area, sq. ft.	106
Heating surfaces, sq. ft.:	
Firebox	294
Combustion chamber	137
Arch tubes	18
Siphons	129
Firebox, total	578
Tubes and flues	4,931
Evaporative, total	5,509
Superheating	2,336
Com. evap. and superheat	7,845
Feedwater heater	Wilson
Tender:	
Type	Water bottom
Water capacity	20,000
Fuel capacity, tons	25
Trucks	Six-wheel

water in the main tank and one side to the atmosphere, has effected a considerable increase in the amount of condensate returned without depleting the supply of heat below that required to bring the water to the maximum temperature allowed by the setting of the thermostatic control valve. Almost 20 per cent of the water evaporated in the boiler is now returned to the hot well.

The boilers include the Type E superheater, in the header of which is incorporated the American multiple throttle. The dry pipe is fitted with the Tangential steam drier.

The spark arrester is the Anderson open type in which no netting is used. It is a box installed between the bottom of the stack extension and the top of the

exhaust nozzle, in the sides and front of which is a series of louvers placed at the proper angles to set up an effective baffling action in the path of the cinders. The smokebox is lagged and jacketed.

The brakes are No. 8ET Westinghouse with two  $8\frac{1}{2}$ -in. cross-compound compressors. The driving wheels are fitted with long brake shoes. Both the engine truck and the trailer wheels have clasp brakes. The locomotives have Union Switch & Signal Company three-indication cab signals. They are fitted with Pyle-National turbo-generators and headlights.

#### Cabs and Auxiliary Equipment

The saturated-steam turret is located under a housing above the roof sheet in front of the cab and is supplied by two dry pipes opening in the domes. Superheated steam is supplied to the whistle, air pumps and turbo generator from a turret on the left side of the smokebox.

Both the air compressors and the generator are installed on the bed casting under the smokebox. The latter is protected by a casing. The exhaust from these three auxiliary units discharges into a cavity in front of the stack, with which it is cast integral. A deflector within this cavity is so arranged as to serve as a muffler, thus almost entirely damping out the sound of the air-pump exhaust.

As far as possible the piping above the running board has been placed under the jacket so that the locomotive presents a generally neat appearance.

The equipment of these locomotives includes the Ashcroft back-pressure gage. In order that they may be used in passenger service, the locomotives are fitted with Vapor steam-heat reducing valves.

The cabs are of the vestibule type. A recess in the exterior of the side of the cab at floor height provides a toe hold for passing from the cab to the running board. A suitable handhold is located at the top of the windows. The cabs are wood lined and the sides, roofs and floors insulated. They are fitted with Prime Clear Vision windows of shatterproof glass.

In addition to the seats for the engineman and fireman, drop seats are provided against the rear wall of the cab for the use of the brakeman. When set up, these seats are opposite windows with arm rests in the cab-vestibule doors. All cab seats have Spongex cushions. There are wind shields in front of the vestibule-door windows as well as in front of the engineman's and fireman's positions.

The engine and tender are coupled by a Unit Safety drawbar and a Type E-2 radial buffer. The pipe connections are Barco flexible metallic conduit.

#### Tender

The tender underframe is a General Steel Castings water-bottom type in which the sump for the Wilson feedwater heater is cast integral. The tank is of welded construction throughout.

There are two General Steel Castings six-wheel trucks. These trucks have 38-in. wheels which are mounted on axles with 7-in. by 14-in. journals, fitted with the American Steel Foundries roller-bearing units with SKF bearings. The wheels on part of the locomotives are Davis one-wear cast steel, and on the remainder Standard one-wear rolled steel. The Simplex unit-cylinder clasp brakes have one cylinder per truck. Miner A-78-XB draft gear is applied at the rear end of the tender.

The principal dimensions and weights of the locomotives are shown in the table.

## Through West-South Class Rates Prescribed

WASHINGTON, D. C.

**C**OMPLETING its work of prescribing joint interterritorial rates lower than the combinations on the gateways between all the major rate territories east of the Rocky Mountains, the Interstate Commerce Commission in a decision dated April 5 and made public on April 25 has ordered such an adjustment of all-rail class rates between Western Trunk Line territory, including extended zone C in Wisconsin, and southern Missouri, on the one hand, and Southern territory, on the other. The decision estimated that the adjustment as a whole will reduce rates on the traffic involved by about 10 per cent, the cuts ranging from the 7 per cent, which will apply on the business moving in greatest volume, to approximately 11 per cent. The carriers may, however, apply the Ex Parte 123 increases to the new scale.

#### Eight Separate Findings

Commissioner McManamy wrote the majority report in the case (No. 26510, Western-Southern Class Rates); Chairman Splawn filed a one-paragraph concurring opinion; Commissioner Mahaffie dissented and Commissioner Caskie concurred in part. Commissioners Eastman, Lee and Rogers did not participate in the disposition of the proceeding. Commissioner McManamy's "Report of the Commission" made eight separate findings, which are summarized as follows:

1. That joint class rates are desirable and necessary in the public interest on all such traffic, most of which now moves on combination rates.
2. That present class 1 rates are, and for the future will be, unreasonable to the extent that they exceed the key rates prescribed, and rates reasonably related thereto, in accordance with the principles stated in the report, to which may be added the increase authorized in *Fifteen Per Cent Case, 1937-1938*, 226 I. C. C. 41.
3. That the present rates on classes lower than class 1 are, and for the future will be, unreasonable to extent that they exceed rates reflecting the same percentages of class 1 rates on foregoing bases as are fixed in western and southern investigations, according to whether governed by western or southern classification, respectively.
4. That rates prescribed be governed for northbound application from southern territory to the western territory described by western classification, and for southbound application by southern classification, except that rates to and from extended zone C in Wisconsin and lake ports north thereof shall be governed by southern classification in both directions; and by specified exceptions to respective classifications.
5. That tariffs containing class rates prescribed shall provide 23 rate-base scales bearing specified percentage relations to corresponding class 1 rates, including those for the lower classes.
6. That to or from points on named short or financially weak lines maximum reasonable rates be determined according to foregoing bases, plus arbitraries similar to those provided for that purpose in southern class-rate investigation.
7. That description of northern boundary of southern territory from Norfolk, Va., to Kenova, W. Va., appearing in order of investigation be modified so as to exclude points on the Virginian Railway from southern territory.
8. That grain and grain products be excepted from application of these joint class rates.

In setting up the new rates the commission prescribes specific class 1 key rates, which are published in an appendix to the report, for application between some 500 designated key points, including "substantially all the larger centers of population and industry in these territories, and in addition a sufficient number of smaller points, to provide an adequate framework for a complete

and practical class-rate structure, thus obviating the necessity for the prescription of any distance rate scales." It is suggested that the key rates "may be blanketed back from a given key over intermediate points, until the next less-distant key point is reached, embracing all related points in logical and natural groupings"; and "if respondents find it necessary they may select additional key points and establish rates reasonably graded in with the key rates."

Chairman Splawn's brief comment says that the adjustment, being "in line with similar adjustments which the commission has made in dealing with class rates, . . . eliminates inequalities and brings these interregional class rates into line with others." He believes that the decision "will be of some assistance in the further work which remains to be done in simplifying and adjusting the class-rate structure."

### Mahaffie Calls for Thorough Job

Commissioner Mahaffie concedes that the prescribed structure will be an improvement "if it is to be assumed that the old method of making rates is to be continued." However, he does not believe that the method should be continued, "or that it is worth while to attempt, at large expense to improve it in comparatively minor particulars." "Transportation of class traffic," Mr. Mahaffie goes on, "has changed vastly since these systems of rates and classifications were devised. Motor transport has become important and has taken much of the business. Instead of attempting to meet this competition by rate reductions, as such, by all-commodity rates available to a limited class of shippers, and by forwarder operations, it is my view that what is required is a thorough-going revision of the entire basis of making rates on this traffic. Such a revision is only delayed by further attempts to patch up an outmoded structure."

Commissioner Caskie favored the establishment of the through joint interterritorial rates, "but not upon the basis prescribed in the report." He goes on to discuss briefly such modifications as he would make in the prescribed structure.

The majority report, after brief reference to events leading to the investigation, points out that with certain exceptions there have been no joint or through one-figure rates between Western Trunk Line territory and the South. "The general basis is combination, usually on Ohio or Mississippi river crossings, Virginia cities, Chicago or other interior points in Illinois territory." Later, in discussing the evidence offered by state commissions and shippers, the report refers to complaints about "the uncertainty incident to determining legal rates." It is here pointed out that "in constructing rates between certain Western Trunk Line points and the South there are 34 points upon which possible combinations may be made," and "frequently the charges collected must be later adjusted because of errors in the rates." A witness for the South Dakota commission expressed the opinion that "approximately one-half of the shipments between the South and Western Trunk Line territory are in the first instance either overcharged or undercharged."

The report next proceeds to consider in turn the suggestions of state commissions and shippers, the governing classification and exceptions, requests for changes in zone boundaries and requests for special treatment of certain commodities. The "General Discussion and Conclusions" observes at the outset that "the free movement of interstate commerce would be greatly facilitated by having available joint rates on all class traffic between the territories under consideration." The showing that the tonnage involved is not heavy is said to be "no justi-

fication for the maintenance of unreasonable rates." It is conceded that small volume "may be a good and sufficient reason for the absence of interterritorial joint commodity rates, but not of class rates, which are supposed to represent a basis unaffected by special conditions pertinent in considering commodity rates." And "publication of lawful joint class rates would make available rates for shipments that might develop of a nature not ordinarily provided with commodity rates, and so preclude the imposition of excessive combinations and consequent filing of complaints."

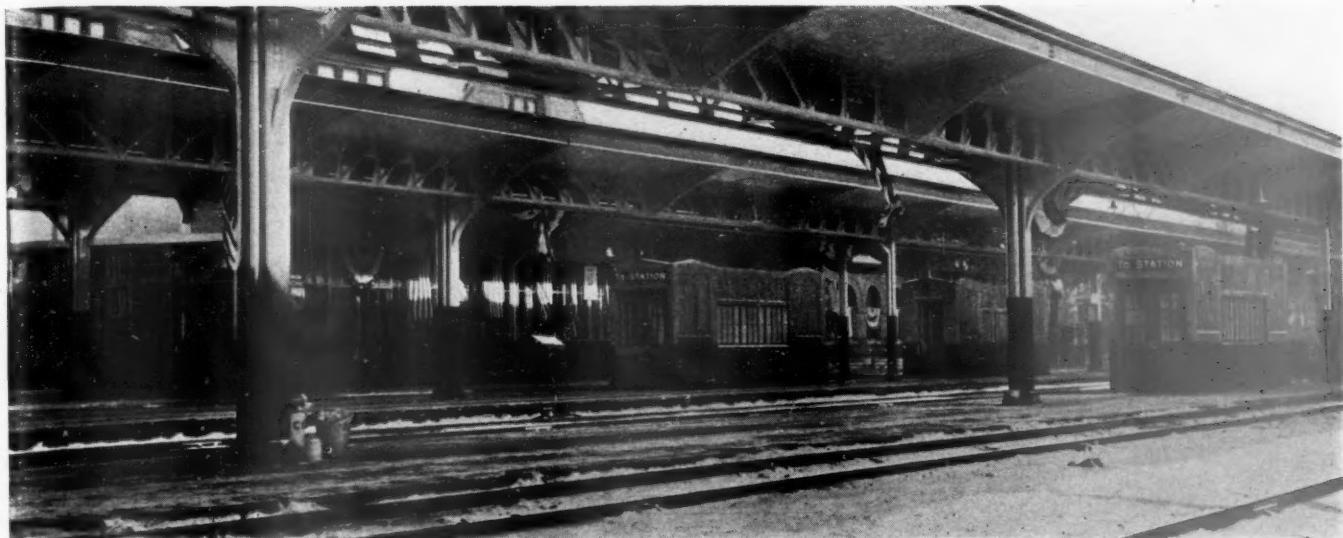
### Volume of Traffic Involved

At another point the 1933 volume of the affected traffic is given as 80,000 tons, yielding \$1,783,000, and the report goes on to observe that such a volume of "comparatively high-grade traffic cannot be regarded as insignificant" when consideration is given to the fact that 1933 "was an extremely poor year from a traffic standpoint." Also, there is cited testimony to the effect that "the maintenance of the high combination rates was one reason for the relatively small movement."

As to the basis for the new rates the commission reaches the conclusion that "maximum reasonable rates for application between Western Trunk Line territory as well as Southern Missouri and Southern territory would result from use as the underlying basis of the same rate levels in the several territories or zones" as in the Southwestern revision, decided November 22, 1934, together with the preceding revision of rates between Western Trunk Line and Official-Illinois territories, applied "in accordance with the Western Trunk Line formula." However, the record was found to warrant for extended zone C in Wisconsin the same separate treatment as was accorded in the Western class-rate investigation. In determining the classification which should govern the through movement, the report, with specified exceptions, concludes that "the use of the destination classification will come as near to doing justice to both shippers and carriers as is possible in the absence of a uniform classification."

There follows a discussion of the key rates and groupings and the avoidance of "rate humps" at territorial borders. In the latter connection it is pointed out how the commission sought to obviate the need for the use of so-called bridge scales of arbitrariness, which have proven difficult and onerous. The suggestion is made that "rates for the key point nearest the gateway should not, merely as a matter of course, be blanketed back over intermediate points until the gateway is reached, but should, where necessary to avoid a rate hump, be graded up from the gateway." Also, "it is expected that respondents will make such provision for traffic actually moving to and from areas near the gateways as will preclude the filing of reasonable complaints by affected shippers which might eventually necessitate the prescription of some method similar to a bridge scale."

Subsequent discussions cover the relations between classes and rate-base scales, the aggregate of intermediates as maximum, the northern boundary of Southern territory, and the Florida peninsula. In the latter connection the usual arbitrariness were allowed as were those for the benefit of "a number of short or financially weak lines." Finally, there is the provision for applications for fourth-section relief to the extent necessary to make the prescribed rate structure effective, and a notation to the effect that lack of evidence precluded a finding with respect to interterritorial 1. c. 1. commodity rates which were originally included within the scope of the investigation.



All Platforms Are Now Protected by Sheds and Are Joined with the Station by Means of a Subway

## Union Pacific Improves Station at Cheyenne, Wyoming

Handling of passengers and servicing of trains greatly expedited by construction of new concourse, subway platforms and sheds

**A**PASSENGER subway, a rearrangement of tracks, new platforms and butterfly sheds and a train concourse, comprise improvements which the Union Pacific has made recently at its passenger station at Cheyenne, Wyo. As this project supplements a rearrangement and modernization of the interior of the station building carried out in 1930, the railroad has obtained the equivalent of a complete new station at a modest expenditure, compared with the complete replacement of the old structure. This result was made possible because of the excellent condition of the substantial stone masonry station building that was built in 1887.

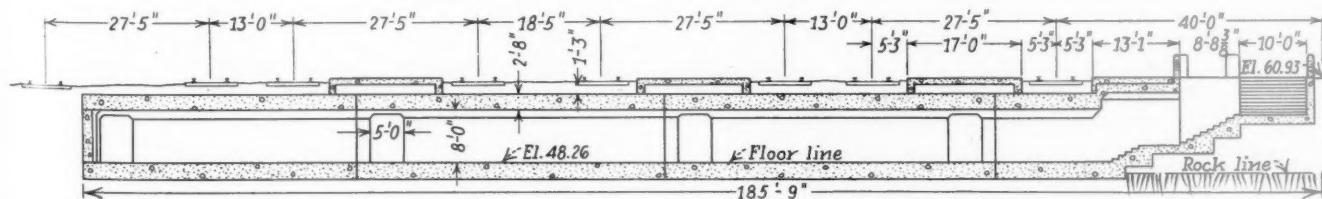
Located substantially at the halfway point between Omaha, Neb., and Ogden, Utah, on the Overland route from the east to the Pacific coast, Cheyenne is a regular stop for all passenger trains, including the streamliners, and is also the junction point with a line to Denver, Colo., and Kansas City, Mo. Until the completion of the recent improvements it was necessary for passengers to cross tracks at grade on their way to and from trains, an arrangement that has become increasingly objectionable as the length of trains has increased. Furthermore,

there are two periods during each 24 hours when four heavy through trains are scheduled to arrive within 45 minutes, each of which has a scheduled stop of 10 to 15 minutes for the changing of engines, train inspection and servicing. As a consequence, even minor deviations from schedules or the operation of extra sections of these trains can easily result in the presence of three or four trains in the station simultaneously.

### Little Change of Track Grades

The subway was constructed without introducing any appreciable change in the grade of the tracks, as the plan provided for stairs from the station floor level into the subway, in addition to stairs from the subway to the platforms. However, the elevation of bed rock was such that it was necessary to raise the tracks a maximum of two feet to gain the necessary difference in elevation for a subway with eight-foot head room and ample floor depth, to avoid more than a nominal amount of rock excavation.

To obtain the desired spacing of tracks it was neces-



Longitudinal Section Through the New Passenger Subway



The New Concourse, Adjoining the Track Side of the Existing Station, Is 104 Ft. Long by 32 Ft. Wide

sary to carry out a considerable rearrangement of the tracks, which required the removal and replacement of 22,300 ft. of tracks, the construction of 10,400 ft. of new tracks and the installation of 25 switches. The station layout embraces seven tracks, spaced 27.5 ft. center to center across platforms, and 13 ft. centers between platforms, except for one pair, which is spaced 18.5 ft. The present plan embraces one platform adjacent to the station and three island platforms reached by stairways from the subway, with provision for an additional future platform on the far side of the layout.

### New Concourse

Access to the subway from the station is afforded by a stairway that is divided into three flights by two landings, the top flight being divided into two branches that extend to the right and left, parallel with the tracks. This stairway opens into a new concourse, 32 ft. wide, that was built against the face of the station building for a distance of 104 ft. and that embraces the two doors that formerly opened from the waiting room to the track area. The other three sides of the concourse are enclosed with walls having large glass areas.

The subway, a rigid frame reinforced concrete box, is 185 ft. long and has a clear height of 8 ft. and a width of 16 ft. Eight drains in the floor are connected by pipes to an automatic sump pump located in a concrete manhole outside the subway. The subway is well lighted with reflectors set at an angle in the roof so that all parts of the floor and side walls are amply illuminated. Neon signs have been installed to direct passengers to trains through the subway and to the station from the subway. At each set of stairs in the subway there are lighted track-number signs and train signs to direct passengers to the trains.

The stairways extend to the platform level from doorways on both sides of the subway, and are protected from the weather by enclosures 6 ft. wide by 27 ft. long. These are of wood construction, with windows in steel sash on each side and copper-clad double swinging doors

at the head of the stairs. Wall areas not occupied by windows are covered on the outside with sheet copper and on the inside with Transite board. The tops are covered with built-up roofing. The platforms, of concrete, are 17 ft. wide by 1,200 ft. long, and are covered for their entire length by butterfly sheds having a steel frame and a roof of two-inch plank covered with built-up roofing.

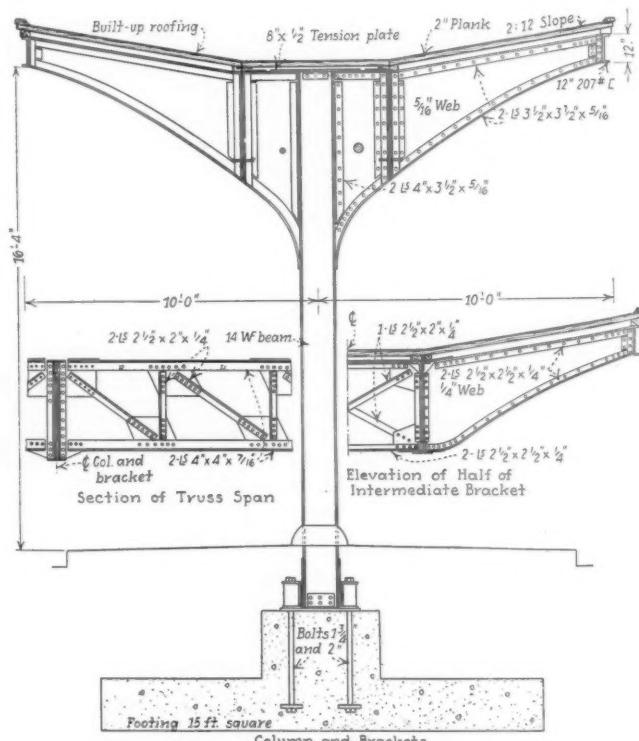
### Substantial Sheds

Two objectives influenced the design of these sheds, namely, a minimum obstruction of the platform by the supports and a maximum protection from the elements. Accordingly, the columns are spaced 58 ft. 8 in. to 67 ft. 3 in. center to center, and the sheds have a width of 20 ft., so that with a track spacing across the platforms of 27 ft. 6 in., the edges of the sheds overlap the roofs of standard passenger train cars by more than a foot.

That the requirements of dead load, as well as snow and wind loads for a shed of these dimensions were severe is indicated by the fact that the spread footings for the columns are 15 ft. square, thus affording a bearing area of 225 sq. ft. The columns are made up of 14-in. wide-flange beam sections with solid-web brackets that flare on graceful curves from the vertical faces of the columns.

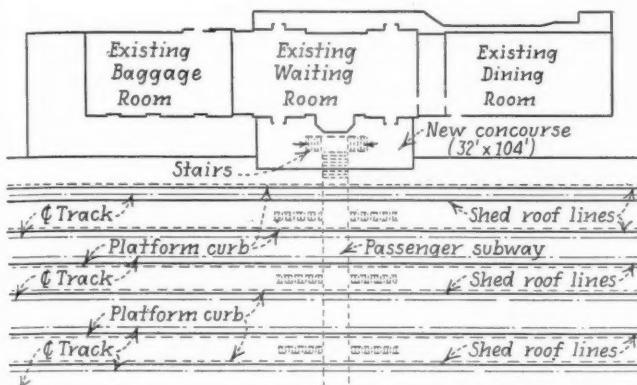
The spaces between the columns are spanned by two lines of trusses, three feet deep and spaced five feet center to center, that frame into the column brackets. These pairs of longitudinal trusses are connected by top lateral bracing and at the third points of the spans by cross sway braces that serve also as the stress transmitting system between pairs of intermediate roof brackets. The ends of the column and intermediate brackets are tied together by 12-in. 20.7-lb. channels that function as facia members as well as the supports for the outer ends of the roof planks.

The improvements also include a complete new system of piping and service outlets for water, steam and com-



Typical Section Through Butterfly-Type Platform Sheds and Details of Intermediate Brackets and Roof Trusses

pressed air, as well as fuel oil for the streamline trains, throughout the station track layout, in addition to a complete drainage system. This project was constructed



The Revised Layout Includes a New Concourse, Joined to Three New Island Platforms by Means of a Subway

under the general direction of B. H. Prater, chief engineer of the Union Pacific. The work was planned and supervised by G. H. Trout, engineer of bridges, and the field construction was handled by W. A. Batey.

## Traffic Clubs Hear Splawn and Sloan

**T**HE semi-annual convention of the Associated Traffic Clubs of America was held at Dallas, Tex., on April 26 and 27, the principal speakers being M. S. Sloan, chairman of the board and president of the Missouri-Kansas-Texas; J. E. Cushing, president of the American-Hawaiian Steamship Company; Walter Bockstahler, president of the Keeshin Trans-continental Freight Lines, Inc.; and the Hon. W. M. W. Splawn, chairman of the Interstate Commerce Commission.

Dr. Splawn, speaking on the subject "Some Current Transportation Problems," said that since the railroads as a whole, after paying taxes, had left for fixed charges only \$4,800,000 in January and February, 1938, as compared with \$77,000,000 for the same two months of 1937, the railroads would have had to increase their revenue on existing freight traffic about 17½ per cent to put them back in the position they were in the first two months of 1937, assuming no increase in passenger and miscellaneous traffic. "No one," he said, "has suggested that such an increase would be practicable."

"In order to meet competition, the railroads have voluntarily reduced their rates below what they could charge, under the orders of the Interstate Commerce Commission and the state commissions, to where the going rates in February of this year, on the traffic actually moving, averaged 10 per cent less than what the railroads would have averaged if the maximum reasonable rate prescribed by the regulatory authorities had been charged. That is to say, the rates which they were applying and charging averaged 10 per cent less than what they could have charged under existing orders of the commission. The level of the maximum reasonable rates was lifted on an average of about 5 per cent in Ex Parte 123. That gave the railroads a margin between the average of what they were charging and the average of what they could charge of 15 per cent. Actually, they hope to lift the rates they

are charging on an average of 5 per cent. That will still leave the average 10 per cent below what they could charge.

"In lifting the railroad rate level 5 per cent, the railroads are facing a considerable diversion of traffic. Whether they will gain as much by the increase of an average of 5 per cent on what stays on the rails as they will lose from traffic diverted to other agencies as a result of these increases, remains to be seen. Some contend that an immediate cut in railroad wages will solve their problems. Last year an increase was given the railroad employees by the managements of the railroad companies before the managements knew whether they would get any increase in freight rate levels in Ex Parte 115. As a result of the increases in wages, they added, on the basis of the traffic of 1937, \$19,500,000 to the payroll for January and February of 1938. The increases in the maximum level of freight rates which the Commission authorized in Ex Parte 123, as has just been said, was about 5 per cent and, on the basis of the traffic of the first two months of 1938, would amount to nearly \$21,000,000. Applied to the depressed traffic of January and February, the increase of 5 per cent was a little more than sufficient to meet the increase in wages. If the wage increase received in 1937 had not been effective in January and February, 1938, the railroads would have had for those two months \$24,000,000 after taxes were paid and before fixed charges, instead of \$4,800,000. Even this would have been less than one-third of the \$77,000,000 they had a year ago.

"These figures emphasize the financial effect of the slump in carloadings. The problem of rail prosperity is primarily the problem of increasing the volume of their business."

According to Mr. Sloan, no serious student of the railroad problem would contend that all the ills could be solved by an increase in traffic volume alone, but anyone entitled to any consideration as an authority on the subject recognizes volume of traffic as one of the important factors. A sufficient improvement in general business conditions to restore a normal volume of traffic would not solve the problem, but it would go far to tide the railroads over the present critical period, while an effective program for its solution is being worked out.

"There is a disposition in some quarters to view the railroad dilemma as a great mystery. As a matter of fact it is very simple. Four dollars in added expenses for every three dollars in added receipts will bring ruin to any business, if it keeps up long enough, and that is what has been happening to the railroads for the last five years. Railroad operating expenses and taxes in the first two months of this year were \$108,132,106 more than in January and February, 1933. Railroads in Western territory fell short of earning their operating expenses and taxes in these two months this year by \$7,824,531. For the railroads as a whole, last January showed the greatest deficit in net income of any month in history.

"Catastrophic conditions have at last awakened even public authority to some appreciation of the situation, and late developments indicate that the problem is to receive early consideration by Congress. He would be a bold man who would attempt to forecast the action Congress will take. The great need, of course, is for a new national transportation policy embracing every phase and agency of transportation and dealing fairly with all. In the meantime, what the railroads need to bring immediate and effective relief, while the larger problem is being solved, is vastly reduced costs of operation, coupled with a sufficient increase in tonnage and rates to make up the difference between income and out-go. Present

prospects of attaining these desired ends may not be over-bright, but that is no reason for not keeping our eyes on the ball.

"Everyone recognizes transportation as a vital factor in distribution, just as merchandising is recognized as a vital factor in distribution. No one questions the right of merchants, wholesale or retail, to earn a fair profit in the performance of their function as distributors. Theoretically, perhaps, there may be more or less acceptance of the fact that the function of transportation also is entitled to a fair return for the service performed, but actually in practice this has not been adequately reflected in the rate structure. The railroad apparently has been the one laborer not considered worthy of his hire."

## Variation in Cost Of Carload Service

WASHINGTON, D. C.

**T**HE Interstate Commerce Commission has issued "as information" a study by its Bureau of Statistics of "Territorial Variation in the Cost of Carload Freight Service on Class I Railways in the United States for the Calendar Year 1936." The study, which "has not been formally considered or approved" by the commission, brings up to date and amplifies a similar study of 1928 costs which was published in 1930.

After an explanation of its statistical methods and the deficiencies of the available data, the Bureau proceeds to develop cost figures on the basis of five different plans. Employing the plan of the earlier study it calculates that in 1936 Class I railways, excluding the so-called coal and ore roads, incurred costs of somewhere between \$74.24 and \$80.88 in hauling a carload of 25 tons an average distance of 300 miles. The former figure results from the calculation of line-haul costs on a gross ton-mile basis, while the latter comes from figuring such costs on a car-mile basis. The comparable figures for 1928 are respectively \$73.41 and \$77.98.

Because the various methods produced fairly uniform results, the figures were summarized in a table showing the relative costs in the three districts and eight regions with the average for the country as a whole taken as 100. This summary table gives the Eastern district figure as 99.3; the Southern district, 89.2; and the Western district, 106.7. The New England region is highest with an index of 132.1, while the Pocahontas region is low with 73.3. There is also a comparison with 1933 figures published in the Tennessee Valley Authority's report entitled "The Interterritorial Freight Rate Problem of the United States." In this comparison the Eastern district figure is the basic 100, and separate index numbers are given on gross ton-mile and loaded car-mile bases. The 1936 Southern district figures are respectively 95.8 and 92.3 as compared with 96.2 and 93.8 for 1933 and 99.3 and 98.7 for 1928; the Western district's 1936 figures are 107.5 and 105.4 as compared with 110.1 and 107.8 in 1933 and 113.0 and 110.4 in 1928.

The study points out that it does not review "factors other than cost which should be considered in the determination of freight rates." Nor does it go into such matters as "competition and what the traffic will bear." Yet despite the limitations of the study, which are next outlined, the Bureau believed it possible with available data "to apply certain statistical tests which give some indication of the relative cost of transporting a ton or carload of freight with a specified load per car a given distance in line haul service in each of the territories."

It adds that "Similarly, we can apply certain tests to indicate the relative costs of origin and destination terminal services and intermediate and interchange line switching services for the average carload of freight in each of the territories."

### Summary of Plans

The five different plans which the study followed and which, as stated above, produced fairly uniform results, are summarized as follows.

**Plan I:** Covers Class I steam railways *other than* those on which the average weight of lading exceeds 40 ton-miles per car-mile, these being in general *the coal and ore railways*. Under this plan, the costs exclude all freight interchange expenses and those platform and clerical expenses applicable to l. c. l. freight service but include the net passenger train deficiency, i. e., the deficiency below what is necessary to cover the railway operating expenses, taxes, rents, and 5½ per cent return on the passenger-train proportion of the investment. This plan is the one followed in the 1928 study. Switching and terminal companies are excluded.

**Plan II:** The computations were restricted to railways with annual freight revenue of at least \$10,000,000, of which not less than 12½ per cent was derived from carload traffic classified as "Manufactures and Miscellaneous" and from l. c. l. traffic combined. The purpose of this selection was to find the carload unit costs of general merchandise carriers. Costs include an allowance for the average interchange in each region. Less-than-carload traffic is treated as a distinct service. The deficiencies in earnings of both the l. c. l. freight service and the passenger-train service are excluded from the carload freight costs.

**Plan III:** Covers all Class I railways. The costs are computed in the same manner as for Plan II, without adding anything for the deficiencies of l. c. l. freight service and passenger service. Switching and terminal companies are excluded.

**Plan IV:** Same as Plan III, except that the deficiency in l. c. l. freight earnings is included as a carload freight cost.

**Plan V:** Differs from Plans III and IV in considering the deficiencies in passenger train earnings as well as in l. c. l. freight earnings as part of the cost of handling carload freight.

\* \* \*



Photo by Information Bureau of Switzerland

One of the Fleet of "Red Arrow" Electric Cars of the Swiss Federal Railroads

# Wheeler to Sponsor Emergency Rail Legislation

Montana senator will introduce bill next week to permit RFC loans to carriers on more liberal terms

WASHINGTON, D. C.

**T**HE legislative action that the Administration intends to take at this session of Congress to alleviate the present railroad crisis was definitely decided upon at a conference on April 26, which was attended by Congressional leaders, high Administration officials, and representatives of labor and management. This conference, the final one in a series that have been held during the past two months, ends what Senator Wheeler characterized as the "conference period" for railroad legislation. The next step will be to draft a bill embodying the conferees' views for submission to Congress. Senator Wheeler indicated that this action would probably come next week. At the same time it was learned that the Association of American Railroads is definitely going ahead with its plan for reducing railroad expenses by calling a meeting of its members in Chicago on April 28 and 29 for the express purpose of setting the wheels in motion for a wage cut. Labor, speaking through George M. Harrison, president of the Railway Labor Executives Association, is just as determined that there shall be no cut in wages, Mr. Harrison reiterating his now well-known position that the unions will fight to the last ditch to prevent such action.

## The Legislative Program

The program, which was decided upon at the April 26 conference of House and Senate leaders, high Administration officials, and representatives of management and labor, and, which Senator Wheeler said might be classed as minimum program for this session and which will be pressed for early enactment, includes the following:

1. That loans be made for the purchase of equipment, taking the equipment as security, including certain types of shop equipment.
2. That work loans be made where the road will agree to replace men who have been furloughed since October, and loans for this purpose might include where necessary up to 25 per cent for purchase of materials.
3. That for a period of 12 months in connection with certain loans by the Reconstruction Finance Corporation to railroads the present requirement be suspended that the Interstate Commerce Commission in approving loans must certify that such railroad on the basis of present and prospective earnings may be reasonably expected to meet its fixed charges without reduction thereof through judicial reorganization, it being understood, however, that loans would not be made to railroads to meet maturing obligations or to pay interest without security.

In addition to these three proposals, which Senator Wheeler and Representative Lea, respective chairman of the Senate and House interstate commerce committees, said would be embodied in a bill at once, the conferees also agreed to the following two points:

1. That the work formerly done by the Bureau of Public Roads with reference to grade separations should be continued at public expense.
2. That where the government orders the railroad to put in bridges in order to accommodate water transportation, that the government should bear its just proportion of the expense.

## The Conferees

The emergency program was agreed upon at a conference held in the offices of RFC Chairman Jesse Jones with the following conferees in attendance: Senator Wheeler, Representative Lea, Interstate Commerce Commissioner Mahaffie, George M. Harrison, chairman of the Railway Labor Executives Association; J. J. Pelley, president of the Association of American Railroads; Judge R. V. Fletcher, vice-president and general counsel for the A. A. R.; C. M. Clay, RFC railroad counsel, and W. C. Costello, special assistant to Chairman Jones.

At the conclusion of the conference, Chairman Jones and Senator Wheeler held a short press conference at which they explained briefly the action of the conferees. Chairman Jones led off by saying that it was not anticipated that "anywhere near" \$300,000,000 would be necessary to take care of the federal loans for rail equipment. He went on to point out that there was not much demand for equipment at this time.

Commenting on the proposal that the requirement that the commission must certify that a railroad is not in need or judicial reorganization as a condition precedent to the granting of a loan be removed from the law, Mr. Jones said that this would permit a number of loans which previously might have been held up.

Senator Wheeler pointed out that the first three proposals will require amendments to both the Interstate Commerce Act and the Reconstruction Finance Corporation Act. It is understood that the legal department of the RFC has already drafted tentative legislation which can be whipped into shape this week for submission to Congress. At the same time, Chairman Lea announced that his committee would meet during the latter part of next week to consider this proposed legislation. Any long-range program for rehabilitation of the roads will be deferred at least until the next session. Senator Wheeler has already asked the Senate committee on audit and control for additional funds for his rail finance subcommittee so that it may continue the study of a program of long-range planning for the carriers.

## Pettengill Bill Favorably Reported

On the same day that the rail conferees were agreeing on a plan for emergency aid to the railroads, the Senate interstate commerce committee favorably reported out two bills which should, in some measure, aid the railroads, and which have been included in the carriers'

plan for the rehabilitation of the industry. These measures are the Pettengill bill repealing the long-and-short haul clause of Section 4 of the Interstate Commerce Act, and S. 3876, a bill introduced by Senator Wheeler last week at the request of the Interstate Commerce Commission, which would require the government to pay the full commercial rate for all its shipments on land grant roads. In reporting the latter bill, the committee attached an amendment which would exempt the shipment of war materials and the transportation of soldiers. It has been estimated that the latter bill would give the carriers between \$6,000,000 and \$7,000,000 a year in increased revenue. Senator Wheeler favors the land grant rates bill, and its early passage is predicted. The prospects for the Pettengill bill, which has already passed the House, depend entirely upon the amount of business the Senate has in its closing weeks and the possibilities of bringing it to a vote. It is believed that the bill can be passed if it can be brought to a vote.

Meanwhile, there is talk in Washington of the creation of a new federal department to administer all federal laws dealing with the transportation and communication industries. It is reported that the proposition is being given "active consideration" by certain members of the House committee on interstate and foreign commerce, and further evidence of this is shown by the fact, as noted in last week's issue, that Representative Bulwinkle, high ranking majority member of the committee, has introduced a resolution calling for a select committee of the House to investigate the possibilities of coordinating all transportation regulation into a single federal department.

#### **Eastman Urges Wage Inquiry**

Turning to the subject of wage reductions, Commissioner Eastman, in a speech delivered before the Chicago Traffic Club on April 26, recalled the wage difficulties between management and labor in 1934 when negotiations were under way for a restoration of the 10 per cent cut made in 1932. He pointed out that as federal coordinator, he had unsuccessfully attempted to compose their differences. At that time, President Roosevelt wrote to both groups telling them that if no agreement were reached, it might be necessary for him to appoint a fact-finding body which would look into the subject of railroad wages and advise the public of its findings. Shortly thereafter, the dispute was settled with the result, according to Mr. Eastman, that "the country, therefore, never has been fully advised of the facts through such an investigation. My own view is that the country is entitled to an inquiry of this character, that it would clear the air, and that it ought to be made now."

Mr. Eastman seemingly foresaw the criticism which was to come from railroad labor when he said that he was offering a word of "caution to employees which they have not sought and doubtless will not welcome." Mr. Harrison, when interviewed at the conclusion of the conference in Chairman Jones' office, suggested that Mr. Eastman keep within his oath of office, and refrain from suggesting violations of the law. He then pointed out the various provisions of the Railway Labor Act, citing the fact that only the President can order an investigation and that that action can only be taken after certain other provisions of the law have been complied with. According to Mr. Harrison, Commissioner Eastman "doesn't know anything about railroad wages and his opinion is of no value." He also thought that "Mr. Eastman is trying to put the cart before the horse." "We've definitely gone on record as being opposed to wage cuts," he said, "and we intend to stick by it. If

the railroads want to try to cut wages, that is their right, but once they have done this, then we will have something to say about it." Mr. Harrison would not comment as to whether or not he was satisfied with the legislative program of the conferees.

#### **New Reorganization Bill Introduced**

As a step in the direction of speeding up railroad reorganizations Representative Chandler of Tennessee has introduced in the House H. R. 10387, a bill which would amend Section 77 of the Bankruptcy Act by setting up a Commissioner of Railroad Reorganizations, to be appointed by the President and to serve at a salary of \$50,000 a year. His office would be in Washington and his duty would be to handle the railroad reorganization work now being done by the commission. The costs of his office would be assessed against the railroads in the process of reorganization. This proposal is similar to that of a special railroad reorganization court, of which there has been considerable discussion during the past two months.

Also, it has been learned that Senator Wheeler is perfecting the drafting and will introduce within the next 10 days a bill to set up a reorganization court and a railroad administrator who would be attached to the reorganization court. It is understood that hearings will begin on the bill immediately following its introduction. The bill will not take precedence over the three-point program already decided upon, but action will be pressed at this session for its enactment. The bill will carry out the recommendations of the Spauln-Eastman-Mahaffie committee report, which recommended the creation of such a court to speed up the reorganizations of railroads now in receivership.

Senator Wheeler held two conferences during the past week which prepared the ground work for the final conference on April 26. At the March 21 conference the Senator met with J. J. Pelley, Judge R. V. Fletcher, Ralph Budd, president of the Chicago, Burlington & Quincy, and Martin W. Clement, president of the Pennsylvania, representing railroad management, and George M. Harrison and representatives of 21 railroad labor organizations representing labor. The highlight of this conference was the suggestion that a certain amount of relief money to be provided for in the Administration's omnibus appropriation bill, soon to be introduced to stem the tide of the depression, be earmarked for the payment of wages to furloughed railroad employees. Senator Wheeler suggested that he would confer with Harry Hopkins, Works Progress Administration Administrator, in an attempt to get him to utilize these furloughed men in railroad maintenance work. The idea would be to have the railroads furnish the material and the WPA furnish the labor, thus giving the railroads a chance to put their plant in first class shape.

#### **Wheeler Cold to Subsidies**

Suggestions were made at this conference for an outright subsidy to the carriers, but Senator Wheeler would have none of this, telling the conferees emphatically that he was opposed to any direct subsidy. Another conference was held on April 23 with RFC Chairman Jones at which the present legislative program was thoroughly discussed and the RFC's part in the picture definitely outlined.

In the meantime, while the railroad problem is about to be threshed out on Capitol Hill, the Chamber of Com-

(Continued on page 773)



The Fast Merchandise Train of the Baltimore & Ohio Ready to Leave Pittsburgh for New York

## Going to Town with Merchandise

Baltimore & Ohio l. c. l. train makes 525 miles in 12 hr.  
45 min. over the mountains

ACH evening except Saturday and Sunday the Baltimore & Ohio starts a solid merchandise train out of Pittsburgh for Jersey City (New York delivery), which makes the 525-mile run in 12 hr. 45 min., or at an average overall speed, including all stops, of 41.3 miles per hour. A similar train is run from Jersey City to Pittsburgh on approximately the same schedule. Each of these trains crosses the backbone of the Allegheny mountains enroute; yet the eastbound train averages 41 m. p. h. over the most difficult portion of the railroad, so far as grades are concerned. These trains average between 10 and 15 heavily loaded baggage cars of merchandise in each direction nightly, and the traffic has been showing steady increases.

During the several months that these trains have been operated, they have established an excellent on-time record. In fact, in several instances, particularly during the Christmas sales rush, department stores in Pittsburgh have advertised in the morning papers of one day special sales on merchandise bought in New York the previous day and enroute to Pittsburgh in the B. & O. fast train at the time the advertisement was being printed.

### Train Consist

Both the eastbound and westbound trains consist of baggage cars with steel wheels, and an ordinary caboose,

pulled by fast passenger locomotives. The traffic is quite evenly balanced in both directions and only a small pool of baggage cars is necessary to protect the runs, since baggage cars arriving in Pittsburgh in the morning are unloaded, then reloaded during the day and sent back to Jersey City on the eastbound train the same evening. A large percentage of the cars used in this service make a round-trip every two days.

The eastbound train consists of merchandise loaded at the various freight houses and by carloading companies at Pittsburgh. At Cumberland, Md., another car is picked up containing merchandise from various points in West Virginia that has been concentrated there for the fast run. One or more cars, depending upon the amount of traffic, are set out at Washington, Baltimore and Philadelphia, while the bulk of the traffic continues to Jersey City, with the final destination Pier 22 on Manhattan island.

For the westbound train, merchandise is assembled at Pier 22, New York city, during the day and lightered to Jersey City in the evening. Meanwhile, a car has been loaded at Elizabethport Transfer with New Jersey merchandise to move on this train. The westbound train sets out cars at Baltimore, Washington and Cumberland, and picks up at Philadelphia, Baltimore and Washington. Thus, in addition to the New York-Pittsburgh cars, this train regularly consists of two New York to Baltimore cars, two Baltimore-Pittsburgh cars, two



Washington-Pittsburgh cars and one New York-Cumberland car. The set-outs, both eastbound and westbound, are made rapidly, switch engines taking these cars to the freight houses after they have been cut out of the fast train at some convenient spot near the main line.

No. 118, the eastbound train, is made up in what is known as Pittsburgh yard, not far from the passenger station in Pittsburgh, from the baggage cars which have been loading at freight houses and elsewhere during the day. The announced closing time is 5:30 p. m., but switching is not begun until 6 p. m., and emergency shipments are accepted during the extra half hour. The switching of these baggage cars from their scattered locations to the yard has to be done rapidly, so as to get the train out of Pittsburgh ahead of other fast freight and passenger trains which follow in the next few hours. In each case, the waybills travel with the cars, and there is no delay because of paper work.

The B. & O. east of Pittsburgh is a three, and, in stretches, a four-track railroad over the mountains, so there is no interference from trains in the opposite direction. However, in the first 58 miles from Pittsburgh to Connellsville, No. 118 passes through such busy industrial districts as Rankin, Braddock and Bessemer, and the scheduled time between the two points of 1 hr. 25 min. is the slowest on any stretch on the railroad. The railway follows the Monongahela river as far as McKeesport and thence the Youghiogheny, and the considerable curvature and heavy switching hold the speed down to an average of 40.8 m. p. h.

From Connellsville to Confluence, the line continues to follow the Youghiogheny, then follows the Casselman river to Meyersdale, just beyond which the summit of the Alleghenies is reached. Connellsville is just over 800 ft. above sea level, and from this point to the tunnel at Sand Patch, 2,258 ft. above sea level, there is a steady climb upward with a maximum 1.25 grade from Yoder to Sand Patch. On the eastern side of the mountain the grade is shorter and steeper, being 1.80 per cent from Sand Patch to Hyndman, 20 miles. The difference in altitude between these two points is 1,325 ft., and from Hyndman to Cumberland, 14 miles, there is an additional drop of 294 ft. on relatively gentle grades. Despite this climb, the fast merchandise trains are scheduled over the mountain at an average speed of 41 m. p. h., and this is accomplished by keeping the trains moving steadily and without stops.

Train No. 118 leaves Connellsville at 8:30 p. m., and is scheduled to pass through the Summit tunnel at Sand Patch at 9:53 p. m. Thus, the run of 59 miles up a 1.25 per cent grade all the way is made at an average speed of 42.6 m. p. h. The train is due by Hyndman at 10:24 p. m., requiring 31 min. to drop down the 19.5 miles of 1.8 per cent grade at an average speed of 37.7 m. p. h.

The eastbound train is operated over the mountain without a helper, except when carrying unusually heavy tonnage, but the westbound train uses helper service nightly from Hyndman to the summit. This helper service is provided by Santa Fe locomotives.

The westbound train has a similar fast schedule from Cumberland to Pittsburgh. The climb of 19.5 miles up the 1.80 per cent grade from Hyndman to Cumberland is

Various Stages Are Involved in the Overnight Handling of Merchandise Between New York and Pittsburgh

made in 37 min. at 31.6 m. p. h., but this is made up on the 59-mile run down from the summit to Connellsville, which is made in 1 hr. 17 min., at an average speed of 46.9 m. p. h. Thus the time of both trains between Cumberland and Pittsburgh is practically identical. The only stop made eastbound is at Connellsville for water. Westbound, the train picks up a helper engine at the foot of the mountain; but apart from that, this train, too, only makes one stop, at Connellsville for water.

#### Cumberland to Weverton

Between Cumberland and Jersey City, the operating problem ceases to be complicated by the topography of the railroad and becomes a question of so scheduling the trains as to cause the minimum interference to the heavy traffic on the east end of the B. & O. Between Cumberland, Md., and Weverton, Md., 93 miles, 12 regular fast passenger trains are scheduled in each direction daily, in addition to the large number of trains of other classes. However, a "spot" has been found for No. 118, which leaves Cumberland at 10:50 p. m. The last previous first-class train is scheduled to leave at 8:20 p. m. and the next following first-class train does not leave until 12:39 a. m., so No. 118 is effectively placed for fast running, so far as other first-class trains are concerned, and trains of other classes are kept out of its way. The grade between the two points in both directions is low, with only an occasional slight "hump," although, in following the Potomac river for practically the entire distance, the railway contains many curves.

The eastbound train is scheduled to cover this 93-mile district in 2 hr. 5 min. or at an average speed of 44.6 m. p. h. Because of the climb from Weverton, 200 ft. above sea level, to Cumberland, 600 ft. above sea level, the westbound schedule is 10 min. slower, or at the rate of 41.3 m. p. h.

#### Weverton and East

The 50.6-mile district between Weverton and QN Tower in Washington is traversed by train No. 118 in exactly 1 hr., and by No. 117 in 1 hr. 10 min. This requires fast running eastbound over stretches where high speeds are safe. The fast passenger trains are limited to a maximum speed of 60 m. p. h. between Weverton and Point of Rocks and 70 m. p. h. between the latter point and Washington, and No. 118 runs the 19 miles between Germantown and Silver Spring in the 70-mile zone in 20 min.

The B. & O. operates 30 first-class passenger trains in each direction between Washington and Baltimore daily, but here again, by careful scheduling, a "spot" has been found for Nos. 117 and 118. The westbound train leaves Baltimore at 11:45 p. m., the last previous first-class train being scheduled to leave that point at 10:35 p. m., and the next following train at 1:30 a. m. No. 117 is scheduled to make the 38.3-mile run in 45 min., or at 47 m. p. h. A similar spot has been worked out for train No. 118, which leaves F Tower, Washington, at 2:05 a. m., one hour after the last preceding first-class train and 1 hr. 39 min. ahead of the next following train, making the run in 40 min., or at 52.9 m. p. h.

Train No. 117 runs from Philadelphia to Camden station, Baltimore, 95.9 miles, in 2 hr., or at a speed of 47.9 m. p. h., and No. 118 traverses the distance in 1 hr. 57 min., or at 50 m. p. h., which, in view of the many cities that are passed, means that considerably higher speeds must be attained where conditions permit. For example, No. 118 runs from Bay View, Md., just outside of Baltimore, to Elsmere Junction, Del., just

outside of Wilmington, 63.2 miles, in 61 min., or at a speed of over 60 m. p. h.

At Park Junction, 1.6 miles north of the B. & O. passenger station in Philadelphia, these trains are turned over to and received from the Reading, which handles them between that point and Bound Brook, N. J.; between Bound Brook and Jersey City they are handled by the Central of New Jersey. On both of these railroads, they maintain their identity as B. & O. trains, and are handled in similar service.

#### Wheeler to Sponsor Rail Legislation

*(Continued from page 770)*

merce of the United States, in its weekly "Washington Review," says that the Chamber, "recognizing the urgent need for thorough consideration by Congress of proposals brought forward in connection with the President's special message on transportation, recommends a joint Congressional transportation inquiry before the next session of Congress." The Chamber also recommends Congressional action at this session of Congress on proposals for immediate railroad relief. The "Review" goes on to say that these recommendations are presented in a report just submitted for consideration at the Chamber's annual meeting during the first week in May.

The report goes on to point out that "the railroad situation, due to continued decline of traffic, has become progressively much more serious since the Chamber in December, in connection with the application of the railroads for increased freight rates, presented a report urging prompt relief for the carriers." The Chamber's report discusses briefly various "immediate-relief" and "long-term" proposals. The three immediate-relief measures recommended are: Financing of equipment purchases by the government, liberalization of requirements for Reconstruction Finance Corporation loans to railroads and elimination of land grant rates. With respect to the long-term proposals the report recommends the joint Congressional inquiry with a view to having recommendations ready for consideration by the next Congress.

\* \* \*



"Why Not Purchase Transportation by Telephone?" is the Theme of this Milwaukee Road Advertising Display at St. Paul, Minn.

# Communications . . .

## A Fireman Upholds Us— Raps D. B. Robertson's Attack

LIVINGSTON, MONT.

### To THE EDITOR:

In the April issue of the Brotherhood of Locomotive Firemen & Enginemen's Magazine, there appears an article entitled "The Truth About Railway Labor," by David B. Robertson, president. It seems Mr. Robertson is endeavoring to answer an article you printed in *Railway Age*, February 26, 1938.

I did not read your article so all I have to go by is the article in the magazine by Mr. Robertson, in which he quotes you as printing half-truths to mislead the public, but in reality, how does Mr. Robertson handle the truth when he stated in his article:

"Back in the booming '20's a man could expect to make approximately 3,800 miles a month. When the pinch of the depression became acute, the average came down to 2,000 miles a month and, in extreme cases, to 1,500 miles."

I would like to know where and when the mileage was cut down to an average of 2,000 or 1,500 a month. If Mr. Robertson can point out just one instance where the mileage of an entire seniority district was cut down to 1,500 miles a month, I would like to know where it is located. Certainly not in any part of the country I have been in the past eight years. It has been my experience, in the past twenty years as a locomotive fireman on the Northern Pacific Railway (Old Montana Division), that the senior men in engine service demand and get close to 4,000 miles on an average, instead of 1,500, and have all through the depression. What a lot of them can't get under the agreements in the way of high mileage, they take. Furthermore, Mr. Robertson knows that condition exists.

In Mr. Robertson's article, he quotes you as saying: "Even between employees, how can genuine co-operation possibly develop, when no consideration is ever shown to the men at the bottom of the seniority roster, while more and more favors are heaped upon those who are secure in their jobs and already have all they can in reason ask for in the way of good wages and favorable working conditions." It has been my experience, in the past twenty years of membership in the Brotherhood of Locomotive Firemen & Enginemen, that you are correct in that statement. The junior men on this division get about as much consideration as a cur dog on a garbage pile. It is all for the senior men, commonly called "old heads."

If the shrinking miles were distributed and the average came down to such a low as 1,500 miles during the depression, as Mr. Robertson said in his article, why did almost half of the members drop out of the fireman's order, not because they wanted to, but because they were forced out by being furloughed and had nothing to pay dues with, while the "old heads" were hogging it all in the same manner as they are doing today, and have been doing as long as I have been in the employ of the railroad. No attempt has been made by the organizations to stop such evils.

### Furloughed With 25 Years' Rights

There was a slight attempt to reduce mileage during the heart of the depression, but it was on paper and not in reality, as far as most of the "old heads" on this division were concerned. For example, one demoted engineer, cut back firing, was allowed on the job he was assigned to 2,800 miles, or the equivalent thereof of 28 days. He worked from 8 to 12 hours a day, making from 100 to 175 miles a day, but only registered one day—therefore, taking as much as 75 miles a day from the furloughed firemen. That is just one instance. There were many more where the senior men took more than their share, throwing the junior men out of work, where if the work had been properly distributed, most of the junior men would have worked right through the depression, and practically all the men would be working today, instead of men with 25 years' rights being furloughed.

To prove to you these conditions exist, I will quote a para-

graph of a letter written by Mr. Geo. M. Monahan, the local chairman of our local union, to Mr. Robertson, international president of the fireman's union. This letter was written on October 2, 1937, and reads as follows: "During my experience as local chairman, I have found that with *very few* exceptions the only firemen that do not steal mileage, are those who do not have an opportunity to do so." Mr. Monahan had at that time been local chairman for about seven years, all through the depression period, when only the "royal family" were working.

This taking of mileage which should go to junior men was brought to Mr. Robertson's attention about a year ago, by myself, and after about eight or nine months correspondence with him, in which I explained and proved such a condition existed, I tried to get his co-operation to put a stop to such an evil, the best answer I could get out of Mr. Robertson was appeal from committee to committee, and finally it simmered down to "I can't intervene."

### Do "Old Heads" Dominate Union?

Why couldn't Mr. Robertson intervene? The only reason I can make out, is the majority of the members of this local are old heads, and the only ones that have gone to the Grand Lodge Convention as delegates in the past twenty years from this local are old engineers with many years seniority as engineers. Therefore, if Mr. Robertson intervened and helped put a stop to this practice, he might lose a vote.

How a man in Mr. Robertson's position can defend a rule that lets one man work from 38 to 48 days a month and get all the mileage he can on top of that enormous work period, while other men in the same labor union are walking the streets with empty bellies, is more than I can understand.

The only argument the senior men have is that they were born first, and their seniority entitles them to all the miles they want.

The senior men have capitalized on the seniority rule and it has become a racket. The intent of the seniority rule was to let the senior man take his choice of jobs, not to allow him to work 40, 50 and 60 days a month, while other men, just as worthy and just as competent of handling the job, are without means of support.

A demoted engineer (who is firing one of the best jobs on the district, a job that pays at least \$230.62 a month—the job doubles the road every other day with a layover day in Livingston) one day last week made two days on a helper job on his layover day as an engineer, and went out on his passenger run the next day, making 224 miles, or \$21.88 extra on the day he was not supposed to work. Another one of Mr. Robertson's petted darlings, that divides the shrinking mileage so willingly.

### Firemen Demand Mileage Limit, Nothing Happens

There is an engineer here, whose mileage as near as I can check it was 5,322 in October, 1937, while men with 20 years' rights were furloughed. The fireman on the same job was off for miles after he got in 3,600 miles, but not Mr. Engineer, his seniority entitled him to all he could get, "so he claimed." I wonder how Mr. Robertson can defend that. These are just a few examples but by a proper check of the mileage on this division you could get a sack full of similar cases.

In the April number of the B. of L. F. & E. Magazine that contains Mr. Robertson's article, there are three more articles, urging the fireman's order to put a reasonable limit on mileage, and stop the hogging. One is by Albert Phillips, general secretary and treasurer of the firemen's organization. One is by V. O. Wilson, Little Rock, Ark., and one is by Ernest L. Root, La Grande, Ore., and almost every issue of the magazine carries articles from all sections of the country. So you can see, hogging as I have reported here must be general the country over. So on what grounds can Mr. Robertson defend his beloved seniority rule, the rule that has thrown more men out of work than any other rule in the nation, the way it is worked by the senior men in engine and train service on the railroads.

And, as for Mr. Robertson's booming '20's, I was employed as a fireman, September 27, 1917, and, there was not a year, during the booming '20's that I was not furloughed, as well as every man below me on the seniority roster, and many above

me. According to Mr. Robertson's figures, in a letter written by him April 16, 1937, to Mr. L. F. Devine, Livingston, Mont., the firemen on Class I railroads decreased 9,906 from October, 1923 to October, 1929. This was in the booming '20's.

He also states in this letter: "When the crash came in 1929, circulars were issued by the grand lodge, urgently recommending to the general committees that the mileage be reduced to the lowest possible minimum, in order to retain as many firemen in service as possible. Our committees, as a rule, acted promptly and made, in many instances, substantial reductions in the mileage limitations. We were seriously handicapped, however, because the engineers were not so considerate. They had jobs, either as engineers or firemen, and they did not care very much about anyone else."

He further stated: "In carrying out this program, the committee found themselves between two millstones. For example: first, the senior men who could hold jobs insisted that they should be permitted to make the maximum schedule mileage if they so desired. In many instances, reports came in to the effect that if their mileage was reduced they would join the B. L. E., as the engineers were circulating stories to the effect that if the firemen joined the B. L. E. they would see to it that they would make as much mileage as the engineers were making, and the engineers were usually regulating their mileage up to the maximum. Second, the junior men, who had no job or who were working part time on the extra list, demand that the senior men divide mileage with them, in order that the junior men might provide at least partially for themselves and their families during the depressed period."

#### Should Juniors Be Happy at Lower Dues?

Mr. Robertson further states in his article: "By way of encouraging the younger men furloughed from service, we suspended practically all dues and assessments, except insurance premiums, which we could not suspend for legal reasons. The younger men retained their status as active members, without other cost."

That is certainly some encouragement to the younger man, to have his assessments reduced \$2.45 per month, so the senior man can capitalize on his seniority and draw from one and one-half to two months' pay each month, twelve months in the year, while the younger man walks the streets or goes on relief. These younger men, referred to by Mr. Robertson, are, in reality, men from 35 to 50 years of age, with as much as 25 years' rights and practically all with families to feed and care for, children to educate, and nothing to do it on because the older men have monopolized all the work.

What about today? On this division there are 146 engineers working—the senior engineers, as engineers, and the junior engineers, as firemen, and 75 men furloughed—7 junior engineers and 68 firemen. However, the engineers are working on the same mileage basis as they were in the booming '20's (3,800 miles in freight service, and 4,800 miles in passenger service). They have been for two or three years. Those that are firing are on a basis of 3,600 miles in freight service, and 4,400 miles in passenger service. There are just as many unemployed today, if not more, as there were in 1932-33. Why don't they reduce their miles now and distribute the shrinking mileage.

I want you to understand that some of the senior men are fair and square. Others would be if they had the proper leadership. However, the majority are whole hog. It even got to where the roundhouse foreman at Livingston had to chain the engineers' mileage register to the desk of the register room to keep it from being stolen, the reason for stealing the register being so that nobody could get a check on those who wanted to exceed the mileage which their schedules allowed them.

#### Railroaders Call Robertson Article "Bunk"

I have talked to many men, both in engine and train service, about Mr. Robertson's article and asked them what they thought about it. Their answer invariably was, "Bunk! Who does he think will swallow that?" They also said a lot more that wouldn't look nice in print.

Mr. Robertson further writes: "I deny, in the name of railroad labor, that such a condition exists. We have no strife and bad feelings on the railroads. Quite the contrary is true. We know that management has the respect of labor and we be-

lieve labor has the respect of management. We are working as a harmonious whole to greater degree than any comparable industry." That is a confusing paragraph. He seems to want the public to believe that there is no strife and bad feeling among the men. If that is his intention, he is certainly sticking his neck out a long way. There has never been so much strife and discontent and bad feeling and right down hatred among the men in my experience in railroading as exists today.

If there is no strife and bad feeling among the men, why are men from all sections of the country writing to the B. of L. F. & E. magazine, to try to get the mileage cut to a reasonable work month, to allow someone besides the "royal family" to earn a crust? Why have the men gone over the heads of the orders, petitioning Congress to enact a federal law to regulate mileage? Are these men contented? Far from it. I, as well as thousands of others, am all fed up on the propaganda put out by the heads of the organizations to keep the hands of the favored in the pockets of poor.

Mr. Dunn, I could go on like this for days, citing instances where the senior men are getting all the cream and about two-thirds of the milk. You are at liberty to print all or any part of this letter, in answer to Mr. Robertson's article in the B. of L. F. & E. magazine, if you so wish.

M. A. MURRAY.

## Government "Economy"

To THE EDITOR:

In these days when officers of the government are talking so much about economy on the railroads, it would appear logical that they should "practice what they preach." Yet I have just noted the routing of a car loaded with Army plane gasoline moving from the St. Louis terminal area to Osborn, Ohio, that moved via the Illinois Terminal, the Chicago & Illinois Midland, the Chicago & North Western, the Indiana Harbor Belt, the Chicago, South Shore & South Bend, the Nickel Plate and the Erie to reach its destination. This routing is more than 400 miles longer or double the mileage necessary to move this shipment by any one of several direct routes,—and this car must be returned empty over the same devious route. Is this an example of the "economy" with which the government would operate the railroads?

RAILROAD MAN.

## Give Warning of Brake Application

JACKSONVILLE, FLA.

To THE EDITOR:

As a "fan" and a small stockholder, I have been reading with interest your accounts of the hearings on the train-limit bill. It seems the proponents have just one argument, but one which might affect the law makers. Possibly this could be offset if the railroads should say they were going to install a device in cabooses which would give warning of brake applications. My idea would be a radio transmitter in the cab, which would automatically send out a signal when train line pressure was reduced, to be picked up by a receiver in the caboose. To prevent false signals from trains on other tracks I suggest:

1. Cab transmitters on different frequencies, requiring tuning of caboose receiver when engine is coupled to train.
2. Cab transmitters all on same frequency, but emitting ICW signals of different pitch. No tuning required.
3. Cab transmitters alike in all respects, using "wired wireless" with track conduction. If signal was heard and no brake application followed, it would indicate a train following was braking. This might prove very advantageous under certain conditions.

As to the action in case of a break-in-two, it would seem that if it occurred in the forward third of the train, the warning would be enough ahead of the shock to be of some help.

But if modern draft gear cannot be kept in shape to handle such trains, that is another story.

H. T. DALRYMPLE.

# NEWS

## Large Wheat Crop Finds Roads Ready

Plans formulated for prompt handling of movement to elevators and markets

Anticipating the largest winter wheat crop (with one exception) in the last 15 years, railroads have already initiated plans for the handling of this heavy movement of grain to elevators and marketing centers without delay and without interfering with the flow of other traffic.

Based on the latest crop report of the U. S. Department of Agriculture, which indicates that the winter wheat crop this year will aggregate 725,707,000 bushels, an increase of approximately six per cent over last year's production and a third greater than the average for the last 10 years, the Car Service Division of the Association of American Railroads announced on April 25 that it has issued orders for the concentration of an unusually heavy supply of box cars in the winter wheat producing states.

This year's winter wheat estimates by the government compare with 685,102,000 bushels produced last year and 546,396,000 bushels for the last 10-year average. Production in the Southwest is expected to reach 385,143,000 bushels this year; Illinois, Indiana, Ohio and adjacent territory, 122,872,000 bushels, and Montana, Idaho, Washington and Oregon, 73,734,000 bushels.

The winter wheat production in the Southwest is so large and comes in such volume over so short a period that the railroads will have to accumulate and store in this territory from 40,000 to 50,000 box cars especially suitable for grain loading. This supply is expected to be accumulated within the next 60 days and in this connection orders have been issued to all railroads that, effective at once, all western-owned box cars be returned to their home roads as rapidly as possible.

The Southwestern winter wheat crop moves early and, while it has frequently taxed the capacity of available railroad equipment within the territory, it nevertheless has been handled successfully by the carriers through the co-ordinating plans of the A. A. R. Car Service Division. Through this central organization (with its car service agents in the field checking the entire operation) other railroads throughout the country have made their equipment available so that when the grain ripens and begins to pass through the combine machines, an adequate supply of cars is ready for immediate loading.

### Nuelle to Head D. & H.?

While it was announced that directors of the Delaware & Hudson took no definite action at their April 27 meeting to elect a president to succeed L. F. Loree, the understanding is that the post has been tendered to Joseph H. Nuelle, president of Lehigh Coal & Navigation and former president of the New York, Ontario & Western.

Throughout the harvest and regardless of Sundays or holidays, thousands of cars are loaded daily, dispatched to elevators, the grain inspected and weighed by local, state and federal authorities, and upon being unloaded, the cars are returned immediately for additional grain loading. In this way and with the cooperation of the producer, elevator operators and others, the crop has been successfully handled by the railroads in recent years.

The preparatory measures taken through the Car Service Division have avoided terminal congestion; as soon as the crop of one section has been moved to market, the same organization transfers its activities to another section until the entire crop has been harvested and moved into elevators, or otherwise binned, for future consumption.

While this year's total winter wheat crop according to present indications will be approximately 40,605,000 bushels greater than last year, it is expected that it will be handled without the issuance of any drastic orders on the part of the railroads.

### I. C. C. Drops Probe of Southern Class Rates

The Interstate Commerce Commission has discontinued, "without prejudice to future consideration of the matters and things involved," its investigation of interstate class rates within Southern territory and between Southern territory and Official territory. The proceeding, No. 27655, Southern Class Rates, 1937, was instituted February 8, 1937, on the commission's own motion "in response to petitions filed by the Joint Conference of Southern State Commissioners, regulatory authorities in Southern states, certain commercial organizations, and certain shippers."

The discontinuance follows the request of these petitioners that "the assignment of hearings in this proceeding be indefinitely postponed." Meanwhile, as noted in last week's issue, the next hearing on the interterritorial rate complaint of the Southeastern governors is scheduled at Buffalo, N. Y., on July 12.

## Eastman Lets Chips Fall as They May

Caustic at low rate contention, calm at subsidy proposal, counsels wage probe

Commissioner Eastman made a "debunking" speech at the Chicago Traffic Club on Tuesday of this week in which he attacked a number of generally-held opinions about transportation. Our difficulties, he said, are due to excessive competition—and the public complains, not at the competition, which they want, but at the results.

Low average railroad ton-mile revenues, he contended, prove nothing—because on some commodities rates have not come down at all. To try to prove American railroad efficiency by means of low ton-mile rates, he said, is like contending that the Southern Pacific is more efficient than the New Haven, because its ton-mile revenue is lower.

Very little of the criticism of the I. C. C. for the inadequacy of its recent award of increased freight rates, he said, has come "from the men in active business who are well informed in regard to freight transportation conditions."

"Some relief in expenses," he continued, "may come with falling prices of materials, but the larger part of railroad expense consists of wages paid to labor. I would not undertake to say that wages are too high without a careful investigation of the facts, any more than I would undertake to say that freight rates are too high; and the Commission is without authority to investigate wages. However, there are some comments on the wage situation that I think I can properly make."

"In the Spring of 1934 I endeavored, at the President's request, to compose the differences between the railroad managements and the employees with respect to a restoration of the 10 per cent deduction in wages which then existed. I was unable to effect a settlement which seemed to me satisfactory and consistent with the President's instructions, and I desisted at length from the attempt, giving my reasons in a public statement. In that statement I called attention to the fact that the President had indicated in a letter to the parties that if no agreement were reached, and in default of arbitration, it might be necessary for him, 'with due regard to the protection of the general public interest, to appoint a commission to examine thoroughly into the labor controversy, covering

(Continued on page 783)

## Rate Making Rule Obscure Says Budd

Cites Eastern fares decision as proof that transport Act needs revising

The recent 6-5 decision by the Interstate Commerce Commission denying the eastern railroads a passenger fare increase affords "clear and indisputable proof" that the Transportation Act is so obscure that it needs clarification, according to Ralph Budd, president of the Chicago, Burlington & Quincy, in an address at the third annual dinner and educational meeting given under the auspices of the Central and Western Passenger Associations for passenger traffic salesmen and other representatives in Chicago on April 25.

"The original Transportation Act of 1920," Mr. Budd continued, "contained the provision that the Interstate Commerce Commission should fix rates which would enable the roads to earn a fair return on the value of the properties devoted to transportation purposes. This was on the theory and belief that the roads were constitutionally entitled to such earnings, and that in order to finance additions and improvements it would be necessary to have sustaining earnings or the necessary credit would not be enjoyed. Subsequently, however, a change was made in the law by eliminating that rule of rate making, and by leaving uncertain what the duties of the Interstate Commerce Commission are in fixing rates."

"In the Eastern fares decision," he continued, "a bare majority took the position that the present law clothes the Interstate Commerce Commission with the duty of not only determining whether the railroads need more revenue, but of deciding precisely what fares it would be good business judgment for them to have, thus taking over one of the most important functions of management, namely, the selling price of the product."

"Other commissioners, notably Eastman, McManamy and Mahaffie, in dissenting opinions, said that since all agree that the railways are in need of greater revenue, the only question was whether the Interstate Commerce Commission or the carriers should decide what fares probably would yield the most revenue. Commissioner Eastman stated 'while my own judgment differs sharply from that of the railroad managements, I feel that they are entitled to take the risk, if that is what they want to do. I would find, therefore, that the proposed fares will not be unlawful.'

"Perhaps the most singular thing in the entire decision is a statement in the majority report, as follows: 'What can be done to make the passenger service of the railroads profitable as a whole is, of course, a matter primarily for the applicants', after having taken from the applicants the right to use their judgment in trying out higher coach fares."

"I want to make it entirely clear that I am not criticising any member of the Interstate Commerce Commission; in this case there were five dissenting votes, leav-

ing six favoring the majority report. I simply refer to the decision as clear and indisputable proof of the fact that the meaning of the law as it now stands is so obscure that those who have to administer it differ sharply as to its meaning. What the railroads need most of all from Congress is a restatement of the rule of rate-making, so that there can be no doubt about the respective responsibilities of management and the commission. It is not fair to assert that an industry which has its selling price determined for it by government authority has reached its present state of financial distress through failure of management. Before reaching any conclusions as to whether the railroads, under private ownership and operation are able to survive, the managements of these privately-owned properties should be given an opportunity to adopt a trial and error method of determining the proper selling price of the products they manufacture. If any doubt existed as to the need of clarifying the present law, it has been dispelled by the majority and minority opinions in the Eastern Passenger Rate Case just cited."

Mr. Budd contended that the part played by the passenger departments in contributing to railroad revenue has been minimized in the past and that passenger revenues can do much towards making the railroads profitable. He contended that formulas for fixing the cost of passenger service are misleading, since many of the expenses attributed to passenger service would not disappear with the elimination of passenger train operation. He cited two factors which determine the value of passenger service, one being its effect on freight routings and the other the amount of money it contributes to revenues.

Mr. Budd was optimistic as to the future of passenger transportation. Branch line passenger service he termed the greatest problem of the passenger department. He also forecast that "we are going to make improvements in passenger service as important as any that have been made since 1933. We are going to have much finer trains with finer furnishings in the future."

### Alaska Railroad Pensions

Representative Ramspeck of Georgia and A. J. Dimond, delegate from Alaska, have introduced in the House of Representatives bills (H. R. 10382 and H. R. 10349) to amend the June 29, 1936, act for the retirement of Alaska Railroad employees.

### New Haven Opens Sport Season May 1

The New York, New Haven & Hartford will introduce this season's schedule of sports and hobby trains with a picture-cycle train, on May 1, from New York to Saybrook, Conn. On May 8, another picture-cycle train will be operated to the town of Suffield in north central Connecticut. Topping the spring-time program, a picture-cycle-fold boat train will be operated to Falls Village, Ct., May 15, and to Falls Village and Canaan, Ct., May 22, both destinations being in the picturesque lower Berkshires.

## Bill Green Raps I. C. C. Truck Hours

Says unions would prefer no limit at all to official okay of 60 hr. week

Rather than accept motor carrier hours of service regulations with limits as high as those prescribed by Division 5 of the Interstate Commerce Commission to become effective July 1, organized labor would prefer to continue working under existing conditions pending the completion of a scientific study of the effect of driver fatigue on safety of operations. This was the position taken by William Green, president of the American Federation of Labor, who led labor's attack on Division 5's report and order at the April 25 reargument before the full commission.

The decision by Division 5 was reviewed in the *Railway Age* of January 8, page 127. Adopting generally the recommendations of Examiner R. W. Snow's proposed report, the Division sanctioned the sleeper cab and prescribed, for common and contract carriers, flexible hours-of-service regulations, providing as maxima a 60-hour week or not more than 70 hours in any period of eight consecutive days, with limits of 15 hours "on duty" and 12 hours "at work" in any period of 24 consecutive hours. Other representatives of labor agreed with Mr. Green that no regulations would be preferable to the foregoing, although there were some suggestions that perhaps a maximum 48-hour week should be prescribed pending the driver-fatigue study. Representatives of the motor carrier industry supported Division 5's decision, and asked the commission to permit it to become effective on July 1.

Mr. Green contended that the record was inadequate to support the findings of Division 5, which he contended embodied the position of the operators into the regulations. He called the prescribed rules "economically unsound" at this time when eleven million persons are unemployed, adding that the maxima prescribed are higher than those in effect in nine states. Comparing the work of a motor vehicle driver with that of a locomotive engineer, Mr. Green pointed out that the latter operates on a private right-of-way whereas the former, being in contact with the daily lives of communities through which he passes, must be "ever alert."

The A. F. of L. president fears that the proposed regulations, prescribing hours "of unreasonable length," would establish precedents which it would be difficult to alter. He appreciates that a study of driver fatigue might take considerable time, but is willing meanwhile to take his chances on labor's "economic power" as a work-hours reducer. Summing up, Mr. Green asserted that the record was lacking in sufficient evidence for a finding based on safety of operations; that the prescribed regulations fail to carry out the spirit of the Motor Carrier Act in that they are designed to perpetuate rather than eliminate unsound practices; that they fail to protect labor or promote safety; and that

the provision stipulating that time spent in a sleeper cab shall not be counted as time on duty is unreasonable. Also, the regulations fail to prescribe hours of service for maintenance forces, whose work has an important bearing on safety of operations. Thus Mr. Green's plea that the order of Division 5 be vacated while the thorough study of the problem proceeds.

Among other representatives of labor was J. A. Farquharson, national legislative representative of the Brotherhood of Railroad Trainmen, who spoke on behalf of that organization's bus-driver members. It was Mr. Farquharson's view that framers of hours-of-service rules should stop talking about time-on-duty and talk about time off-duty—there should be a provision for 12 continuous hours off-duty in every 24 hours. He pointed out that under the railroad hours-of-service law a train service employee could work alternately two hours and lay off two hours "for the rest of his life."

However, Mr. Farquharson thought that Division 5's order might be a step in the right direction, although he went on to suggest that the commission could do better. In the latter connection he urged the commissioners to consider an 8-hour maximum which might have to be put in a spread of 12 hours. And he would not have any "off-duty" time counted until a driver has been off the vehicle for at least three continuous hours.

The principal argument on behalf of the operators was made by J. N. Beall of American Trucking Associations, Inc., who urged the commission to uphold Division 5. A. T. A., Mr. Beall said, objects to postponing regulations until the fatigue study is made. Meanwhile, however, the trucking industry is not only willing but anxious to have safety investigations continued. At one point Commissioner Eastman referred to the pending bill for a 6-hour day on railroads, and Mr. Beall replied that it was his understanding that a railroad 6-hour day bill is offered every time wage negotiations are under way—"that's been going on for years."

#### Santa Fe Bus Routes

Joint Board No. 39, composed of Floyd F. Shields of Kansas and A. S. J. Shaw of Oklahoma, has recommended in a proposed report that the Interstate Commerce Commission grant a common-carrier bus certificate to the Santa Fe Trail Transportation Company, affiliate of the Atchison, Topeka & Santa Fe, for operations between Liberal, Kans., and Texhoma, Okla.-Tex., and Ft. Scott, Kans., and Riverton. Also, the Board would permit the operation of special party or chartered services from and to the territory involved.

#### Wabash Seeks Permission to Spend \$1,235,400

Permission to spend \$1,235,400 for repairs to 300 box cars and to roadbed was asked by the Wabash in a petition filed with the federal district court at St. Louis, Mo., on April 23. Of the total, \$176,700 is for the repair of the 300 box cars, \$550,000 is for the purchase and laying of 55 miles of new track at various points along

the line, \$288,700 is for laying 47 miles of relay track on branch lines and sidings, and \$220,000 is for the purchase and placing of gravel ballast.

#### N. Y. Commission on Fruits, Vegetables and Hay

The New York Public Service Commission has ordered railroad carriers operating in the state to cancel proposed intrastate rate schedules under which they sought authority to cancel the alternative application of class rates on fruits, vegetables and hay. The order of the state commission is in harmony with conclusions reached by the Interstate Commerce Commission regarding similar proposals on interstate rates in Official territory, reported in the *Railway Age* for April 23, page 747.

#### Railroad Supporters to Discuss Enlisting Employee Aid

"Selling the Railroads to Their Employees" is the topic of the next meeting of the Committee on Railroad Support in New York on May 5, when officers of several railroads will be present to consider the proposals of the Committee for obtaining increased co-operation from employees on legislative as well as sales-promotional matters. Membership on the Committee is by invitation only, but persons properly interested in the work of the Committee and desiring to participate in its activities may indicate their availability, if they so desire, by addressing the Committee at 10 Park avenue, New York.

#### Motor Act Amendments

The Senate committee on interstate commerce has reported favorably the bill (S. 3606) introduced by Chairman Wheeler to effectuate Motor Carrier Act amendments recommended by the Interstate Commerce Commission in a special report transmitted to Congress on March 2. This March 2 report, outlining the proposed amendments and the commission's supporting arguments, was reviewed in the *Railway Age* of March 5, page 425.

Meanwhile, Representative Andrews has proposed other Motor Carrier Act amendments which would restrict the I. C. C.'s jurisdiction over intrastate motor carriers handling interstate business.

#### U. S. Supreme Court Orders

The Supreme Court, at its April 25 session, handed down a decision upholding nine orders of the Interstate Commerce Commission prohibiting railroads from making allowances for car spotting for certain industrial plants in Louisiana and Texas. The orders of the commission affected payments by carriers to the Pan American Petroleum Corporation, the Celotex Company, Standard Oil Company of Louisiana, Humble Oil & Refining Co., Magnolia Petroleum Company, Gulf Refining Company, the Texas Company, Great Southern Lumber Company, and the Bogalusa Paper Company of Bogalusa, La.

The opinion by Mr. Justice Roberts stated that the orders of the commission prohibiting the payment of allowances for switching services performed by the industrial plants resulted from a report by

the commission following a general investigation of the subject. The industrial companies had contended that the commission's findings were not based on facts and that the commission had exceeded its power in issuing the order.

In another case of the Baltimore & Ohio versus the United States, the court found that an order of the commission prescribing maximum rates on coke moving from southern points into central territory is within the jurisdiction of the commission, is supported by the necessary findings of fact, and does not disregard ordinary standards for the determination of the reasonableness of rates.

#### P. R. R. "Off the Beaten Track" Run to Cover Cumberland Valley R. R.

The Pennsylvania will open its "off the beaten track" excursion season on May 1, with a 450-mile trip by rail through the Shenandoah and Cumberland valleys of the Blue Ridge mountains, covering five states. Starting from Broad Street station, Philadelphia, Pa., at 7 a. m. (e. s. t.) a fast run will be made to Baltimore, Md., stopping at Chester, Pa., and Wilmington, Del. At Baltimore the train will be turned over to the Western Maryland for a run through the heart of Maryland to Hagerstown, thence by way of the former Cumberland Valley road (now part of the P. R. R., Philadelphia division) to Winchester, Va. After an hour's stop there, the return trip will be made over the Cumberland Valley tracks to Harrisburg, thence by way of the Pennsylvania main line to Philadelphia, where the train is due to arrive at 8:30 p. m. (e. s. t.).

#### Senate Committee Votes to Report Pettengill Bill

The Senate committee on interstate commerce on April 26 voted to report favorably the Pettengill bill (H. R. 1668) to repeal the long-and-short-haul clause of the Interstate Commerce Act's fourth section. Thus did Chairman Wheeler, an opponent of the measure, keep his promise to give the Senate an opportunity to vote on it at the present session.

Whether the bill will get through the upper body is, of course, uncertain in view of the manner in which measures on the calendar are sometimes set aside again and again until the session's closing days arrive to make them the "forgotten" business amidst the adjournment rush. The bill passed the House of Representatives by a vote of 268 to 120 on April 14, 1937, during the first regular session of the present Congress. If it does not now pass the Senate it will die with adjournment, and a new bill will have to be started on the journey through both branches of Congress.

#### Crew of Six Required on Express Refrigerator Trains

A crew of six persons must be employed on a train of express refrigerator cars loaded with perishable products such as strawberries, according to a ruling made by Attorney-General Jack Holt of Arkansas. The opinion was prepared in response to a request for such a ruling from Labor

Commissioner E. I. McKinley. In his letter asking for the ruling, Commissioner McKinley said he was informed railroads were contemplating moving perishable goods in express refrigerator cars and classifying the train as passenger units, using the five-man crew of passenger trains for operation. No passengers, however, would be accepted on such trains, according to the letter. An Arkansas law requires only five men to a passenger train.

The ruling stated "It is our opinion that the classification of the train depends upon the use to which it is put. If a train is being used to transport freight and no passengers are carried, it is a freight train and should be operated by a full crew as provided by the laws of Arkansas."

### March Locomotive Shipments

March shipments of railroad locomotives, as reported by the country's principal manufacturing plants to the United States Department of Commerce, totaled 48 locomotives, including 26 steam and 22 Diesel-electrics, all for domestic service. In March, 1937, shipments totaled 36 locomotives, including 23 steam and 11 Diesel-electrics for domestic service and two steam for export. Shipments for this year's first quarter have totaled 99 locomotives as compared with 71 in the first three months of 1937.

Unfilled orders at the end of March totaled 119 locomotives, including 74 steam, 26 electrics and 9 Diesel-electrics for domestic service, and 10 steam for export. On March 31, 1937, there were outstanding unfilled orders for 431 locomotives, including 382 steam, 20 electrics and 27 Diesel-electrics for domestic service and one steam and one Diesel-electric for export.

The statement carries the usual notation that the data "do not include locomotives produced by railroad companies in their own shops, or self-propelled cars of any description."

### March Truck Loadings 30.39 Per Cent Under 1937

Movement of freight by motor truck in March was 30.39 per cent under the volume reported for the corresponding month last year, according to American Trucking Associations, Inc. The index figure, based on the monthly average for 1936 as 100, stood at 83.11, compared with 79.51 for February and 119.67 for March, 1937.

Comparable reports were received from 137 carriers in 30 states, transporting an aggregate of 441,841 tons last month, compared with 408,284 tons in February and 634,708 tons in March, 1937. The March figures represented an increase of 8.21 per cent over February tonnage, but this increase was accounted for, in part, by the fact that March had four more working days than February.

Relatively few carriers reported larger volume last month than for the corresponding period a year ago. In the general merchandise class—package freight, which accounted for almost 60 per cent of the total volume of all reporting carriers, tonnage was 28.9 per cent under March, 1937, and only 1.1 per cent over February. Movement of cars by automobile transporters reflected the decreased activities of motor

manufacturers. Last month these carriers delivered 21,814 cars, while in March, 1937, they handled, 55,282, and 18,660 in February, this year. Their business was 60.55 per cent under last year, but 16.9 per cent over February. For haulers of petroleum products, March tonnage was 15.8 per cent over February and 11.6 per cent under last year's volume. The movement of iron and steel, which reached a low point in February, was up 40.2 per cent. Compared with March, 1937, however, it was off 58.5 per cent.

### Pennsylvania Shop Excursion

More than 770 railroad "fans," camera enthusiasts and locomotive model builders traveled on special trains to the Pennsylvania's locomotive shops at Columbus, Ohio, on April 24, to review the facilities and take pictures. Of the total, 326 were from Chicago, 253 from Detroit, 125 from Pittsburgh, Pa., and 167 from St. Louis, Mo., Indianapolis, Ind., and Dayton, Ohio. One of the interesting features of this excursion was the large number of women passengers, some of whom were as agile at climbing upon locomotives as men. About half of the passengers out of Detroit were women.

This excursion was arranged so that the round trip could be made in one day. Special trains carried a standard inspection car at the rear so that railroad enthusiasts were afforded an unusual view of the right-of-way and camera fans could snap pictures en route. At the shops the enthusiasts were divided into groups of 25 and escorted through the facilities. Upon completion of the tour they were allowed an hour in which to take pictures of locomotives parked outside of the shops.

### Missouri Pacific Hospital Association Can Continue to Operate

Quo warranto proceedings will not be instituted by the attorney-general of Missouri against the Missouri Pacific Hospital Association for reasons outlined in an opinion approved by the attorney-general on April 18. As described in the *Railway Age* of February 26, page 389, the St. Louis Medical Society asked that the attorney-general file quo warranto proceedings on the grounds that the incorporation of the hospital was and is void and that legally it is not now a corporation, although exercising corporate functions, and

that it was validly incorporated but is functioning now beyond its charter and corporate powers by reason of the contention it is engaged in the practice of medicine.

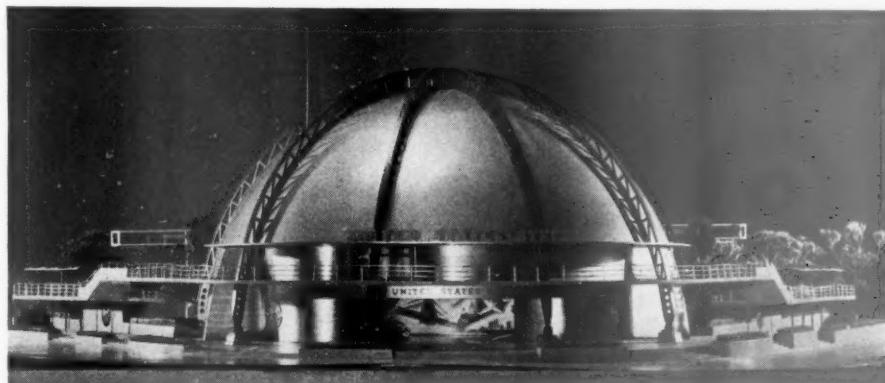
The opinion, written by the assistant attorney-general, contends that the Supreme Court would not sustain the proceedings and that operation of the Missouri Pacific Hospital is not and could not be harmful to public interest. "The hospital has an outstanding bonded indebtedness of \$90,000 carried by individual members of the association" the ruling said. "Consequently to oust this institution by quo warranto, if the result be to destroy its operation as a hospital, would, in our opinion, be not only against public interest but would visit upon that part of the public, namely, those of it who are members of the association holding the indebtedness of the institution, a particular injury." Even if deprived of its charter, the hospital, the attorney-general said, would find it possible to continue operations as at present, including the employment of its own doctors, as a voluntary association. "Hence," the opinion said, "in its final analysis we believe the court in passing upon the writ, if issued, would decide that the remedy to be applied to achieve the cure desired would be too drastic and hence we further believe the result of a quo warranto proceeding would be unsuccessful so far as an invalid corporation is concerned."

### Stainless Steel Dome to House U. S. Steel Exhibit at Fair

For housing its exhibits at the New York World's Fair of 1939 the United States Steel Corporation will construct a building involving many innovations in design and construction. Essentially the structure will consist of a hemisphere of polished stainless steel, 66 ft. high and 132 ft. in diameter, which will be supported by 10 external steel trusses curved to fit the contour of the hemisphere. The dome will contain 28,000 sq. ft. of stainless steel.

The trusses will meet at a point 72 ft. above the ground, the over-all height of the exhibit structure. They will weigh a total of 350 tons, will be painted blue and will conceal lighting fixtures by means of which the dome will be illuminated at night. Other details of the building are to be accentuated in red.

Colored cement is to be used extensively



Model of the Stainless Steel Building Which Will House the Exhibit of the United States Steel Corporation at the New York World's Fair of 1939

at the base of the building, and in an elevated terrace which will extend across the face of the structure at the second floor level and for some distance each way to form a lounging place and promenade for visitors. Seating arrangements for 500 persons will be provided on the terrace and throughout the grounds, while an additional 1,000 people will be able to stroll on the terrace.

Part of the second floor of the exhibit hall is to be suspended from the trusses by means of cables. From this level an executive lounge will project to the rear of the building where it will overlook a landscaped garden. The entire structure will be air-conditioned and equipped with modern ventilating apparatus. Both floors will contain exhibits showing how steel in many forms is basic to civilization. The exhibits will be designed to demonstrate graphically the vital part steel plays in the lives of everybody.

### Bureau of Explosives Annual Report

No person was killed in the transport or handling by rail of any class of explosives or other dangerous articles in Canada or the United States during 1937 and for the past ten years, according to the annual report for 1937 of W. S. Topping, chief inspector of the "Bureau for the Safe Transportation of Explosives and Other Dangerous Articles," Association of American Railroads. During the year, ten persons suffered slight injuries, one from fire following the derailment of a tank car of gasoline, and nine from acid or other corrosive liquid burns.

Concerning the tank car department of the bureau it is reported that the tank car committee transmitted, during 1937, 403 applications for approval of new designs, materials and construction of new tank cars and of changes in existing cars and their appurtenances. In connection with the proposed general revision of I. C. C. regulations and specifications the bureau has prepared a complete revision of all shipping container specifications, in which "emphasis has been laid on clarity, brevity, and the elimination of unnecessary details," especially in the cancellation of rules covering containers no longer in use.

A comparative summary showing transport losses chargeable to explosives and other dangerous articles reveals that in 1937, 1,065 accidents occurred, involving a property loss of \$254,645, as compared with 1,218 accidents in 1936, with a property loss of \$511,352. 1937's property loss is less than that for any year 1927-1936, inclusive. According to a table showing the particular causes of accidents involving explosives and other dangerous articles, derailment or collision continued to be the chief source of loss, amounting to \$229,402 out of the total loss of \$254,645.

The staff of the bureau, which comprises 23 field inspectors and one special engineer (hired for 53 days during the year), made 21,308 routine inspections during 1937, as compared with 24,686 in the previous year. Representatives of the bureau also presented a total of 184 lectures on the sub-

ject of safe transport of explosives and other dangerous commodities and were heard by 9,749 persons.

### N. R. A. A. Assets Increase

The annual report of the National Railway Appliances Association for the year ending March 31, 1938, shows that the four-day exhibit of this association at the International Amphitheatre, Chicago, on March 14-17, was conducted with an excess of receipts over disbursements. Owing to the fact that the exhibition space rentals for 1938 was in excess of the disbursements for the exhibition, \$6,069, or 20 per cent, was refunded to exhibitors.

The revenues and expenses of the association for the fiscal year ending March 31, 1938, are as follows:

Cash Receipts:	
Dues collected from members .....	\$4,445.00
Exhibition space rentals .....	30,278.60
Sale of United States Treasury bills on hand	
March 31, 1937 .....	30,000.00
Refund on furniture rental charges of 1937 exhibition .....	796.56
Banquet tickets .....	288.00
Sundry .....	6.95
Total cash receipts..	\$65,815.11

Cash Disbursements:	
Purchase of United States Treasury bills .....	\$30,000.00
Exhibition expenses .....	20,499.60
General and administrative expenses .....	5,573.65
Exhibition space refunds:	
1937 show .....	3,106.04
1938 show .....	6,069.37
Sundry .....	10.14
Total cash disbursements .....	\$65,258.80

Excess of cash receipts over disbursements for the year .....	\$556.31
Cash balance, April 1, 1937	257.21

Balance, March 31, 1938—consisting of:	
Cash on deposit with the First National Bank of Chicago .....	\$554.27
Petty cash—in possession of C. H. White .....	259.25
	\$813.52

The following is a comparison of the cash and securities owned by the Association at March 31, 1938 and 1937:

	March 31		Increase
	1938	1937	
Cash balance ..	\$813.52	\$257.21	\$556.31
	30,000.00	30,000.00	.....
Total .....	\$30,813.52	\$30,257.21	\$556.31

### Historical Society Bulletin Features Car Building History

A reprint of an address entitled "A Century of Car Design and Examples of Present Construction" delivered by V. R. Willoughby, vice-president in charge of engineering, American Car & Foundry Co., before the New York chapter of the Railway & Locomotive Historical Society, in New York, in March, 1937, features the current bulletin published by the national society, designated as, No. 46. The article, which traces the design of the railroad car from the earliest days to the present and mentions briefly certain modern developments and present problems, is fully illustrated with photographs of old rolling stock. There is also contained in the booklet a reprint of a paper on Chicago's Grand Central station, read by Armstrong Chinn, chief engineer, Alton, before a joint meeting of the engineering division of the Western Society of Engineers and the Chi-

cago chapter, Railway & Locomotive Historical Society, in October, 1936.

Contributed material by members of the society make up the remainder of the bulletin. These include an account of locomotives operated by the Old Colony as an independent carrier, fully illustrated and complete with a locomotive roster; a short article on the Seward Peninsula railroad of Alaska; a brief description of the Comet and Catawissa locomotives built for the Schuylkill railroad (now Reading) in 1833; the histories of several short lines, including the now abandoned Moira & Bombay of New York, the Sawyer River railroad of New Hampshire, the Hoosac Tunnel & Wilmington, the Syracuse & Chenango Valley (now part of the New York Central); an article on Seth Boyer, the New Jersey inventor and pioneer locomotive builder; and discussions concerning the earlier efforts to bring about standardization of time in the state of Connecticut.

### C. N. J. and Susquehanna Curtail Local Passenger Service

Increased competition and burdensome costs have driven two more New Jersey carriers to the extremity of severely curtailing local passenger train schedules. In seeking to take off certain trains in the Newark, N. J., and Winslow junction territories, the Central of New Jersey submitted statements to the New Jersey Board of Public Utility Commissioners which showed that an average of 11 passengers were carried on the trains slated for discontinuance. By permission of the utility board the road cut five week-day and five Sunday trains from its Newark-Elizabeth connecting service, four Saturday trains from its Elizabethport and Chrome branch schedules, ten Sunday trains from its Newark and New York branch, and two week-day trains from its service between Winslow junction and Lakehurst, effective April 24. All of these trains except those on the last-named route are operated in local service in territory served by buses, while in the case of the Lakehurst-Winslow junction service, arrangements have been concluded for mail deliveries at Chatsworth by a motor truck service, for the handling of express matter by freight trains and the creation of a flag stop at that point for the road's Jersey City-Atlantic City train, the Blue Comet.

The trustee of the New York, Susquehanna & Western was granted approval by the utility board to discontinue two week-day and two daily trains arriving at or leaving the Jersey City terminal and to discontinue operation of five daily, two week-day, two Sunday, one Saturday and one holiday train between North Hawthorne, N. J., and Butler and intermediate stations. Bus service will be inaugurated in substitution of the latter runs.

### Freight Car Loading

Loading of revenue freight for the week ended April 16 totaled 537,585 cars, an increase of 15,607 cars or three per cent above the preceding week, but a decrease of 208,938 cars or 28 per cent below the corresponding week in 1937 and a decrease

of 373,731 cars or 41 per cent below the same week in 1930. All commodity classifications except coal and coke showed increases over the preceding week, while all commodity classifications except grain showed decreases under last year. The summary, as compiled by the Car Service Division, Association of American Railroads, follows:

#### Revenue Freight Car Loading

For Week Ended Saturday, April 16			
Districts	1938	1937	1936
Eastern . . . . .	118,132	173,046	148,875
Allegheny . . . . .	101,105	159,059	132,232
Pocahontas . . . . .	34,419	48,438	45,082
Southern . . . . .	88,275	109,487	95,618
Northwestern . . . . .	63,214	99,304	73,880
Central Western . . . . .	88,568	103,406	93,060
Southwestern . . . . .	43,872	53,783	53,531
Total Western Districts . . . . .	195,654	256,493	220,471
Total All Roads . . . . .	537,585	746,523	642,278
Commodities			
Grain and Grain Products . . . . .	31,215	29,113	30,180
Live Stock . . . . .	11,251	13,056	12,972
Coal . . . . .	88,014	119,535	109,800
Coke . . . . .	4,121	10,565	6,827
Forest Products . . . . .	25,422	36,269	31,537
Ore . . . . .	7,813	35,934	9,569
Merchandise i.c.i. . . . .	150,722	173,349	161,603
Miscellaneous . . . . .	219,027	328,702	279,790
April 16 . . . . .	537,585	746,523	642,278
April 9 . . . . .	521,978	711,079	621,843
April 2 . . . . .	523,489	721,229	613,581
March 26 . . . . .	572,952	756,416	594,789
March 19 . . . . .	540,332	754,922	568,851
Cumulative Total, 15 Weeks . . . . .	8,217,790	10,642,903	9,237,713

In Canada.—Cars loaded in Canada in the April 16 week, it is announced by the Dominion Bureau of Statistics, totaled 40,188, as compared with 46,865 last year and 42,938 in the preceding week.

Total Cars	Total Cars Rec'd from Loaded Connections
Total for Canada:	
April 16, 1938 . . . . .	40,188 21,029
April 9, 1938 . . . . .	42,938 20,314
April 2, 1938 . . . . .	42,089 22,574
April 17, 1937 . . . . .	46,865 30,903

#### Cumulative Totals for Canada:

April 16, 1938 . . . . .	663,735	331,175
April 17, 1937 . . . . .	704,854	423,113
April 11, 1936 . . . . .	628,838	345,231

#### Government Should "Ump" in Consolidation Problem

A simple solution of the railroad consolidation problem is for the government to "take its hands off, except as umpire." This thought was advanced in a discussion of business-government relations presented by W. Averell Harriman, chairman of the Union Pacific, before the 21st annual meeting of the American Association of Advertising Agencies at White Sulphur Springs, W. Va., on April 22. The reference to railroad consolidation was brought up in connection with the speaker's use of changing public and governmental attitude toward "bigness" in the railroad field as an illustration of the need for business to inform the public honestly of its plans and thus to deal with political issues intelligently.

Mr. Harriman, in his treatment of the carriers as a case in point, pointed out that "the railroad industry was one of the first to be faced with political issues" and that the history of the field abounds with instances wherein railroad executives allowed public opinion to grow antagonistic to certain of their plans and practices and failed to treat such attitudes properly. As

a result, the public and the government took severe action which "has adversely affected for many years the whole course of the industry, and incidentally the public interest as well."

Thus, as Mr. Harriman developed it, the public grew fearful of railroad consolidation at the turn of the century and "trust busting" Theodore Roosevelt, after a personal difference with the speaker's father, attacked railroad mergers as "the personal empire building of individuals." This action succeeded in blocking certain large merger plans and in stopping the "sound trend" toward consolidation. This unsound attitude, the speaker claims, was a result of mis-directed public opinion, which was later convinced of its error, as illustrated by later enactment of the Transportation Act of 1920 to encourage consolidation. Today, "everyone is demanding the consolidation of railroad properties."

For today, Mr. Harriman proposes that to bring about consolidation most effectively, the government should act only as "umpire," leaving to the I. C. C. the authority to approve, without further restriction, those mergers which it holds to be in the public interest. The rest should be left to railroad management. The speaker believes that if this plan is followed, "sound consolidations would follow, developed by men who best understand the needs of the business."

#### Lightweight Box Car Construction Demonstrated

On April 20, the Pullman-Standard Car Manufacturing Company conducted approximately 80 railroad officers and engineering representatives of some of the other car builders through the Michigan

#### Comparison Between Pullman-Standard Car Manufacturing Company's Lightweight Car and Standard A. A. R. Car of Equal Size and Capacity

	Weights	
	PSCMCO (lb.)	A. A. R. Car (lb.)
Car body . . . . .	21,000	29,100
Trucks . . . . .	14,600	15,400
Complete car . . . . .	35,600	44,500
Load limit . . . . .	133,400	124,500
Ratio of lading to rail load—per cent . . . . .	78.9	73.1
Underframe . . . . .	5,797	7,879
Sides . . . . .	3,532	5,933
Roofs . . . . .	1,190	2,086
Doors . . . . .	527	724
Door fixtures . . . . .	415	556
Ends . . . . .	1,209	2,350
Material		
Side sheet . . . . .	0.05-in. H. T. low alloy.	0.10-in. O. H. S.
Roof sheet . . . . .	0.05-in. H. T. low alloy.	No. 14 ga. O. H. S.
Door sheet . . . . .	0.05-in. H. T. low alloy.	0.10-in. O. H. S.
End sheet—bottom . . . . .	1/8-in. H. T. low alloy.	1/4-in. O. H. S.
End sheet—top . . . . .	3/32-in. H. T. low alloy.	3/16-in. O. H. S.
End plate . . . . .	1/8-in. H. T. low alloy.	Int. with top sheet.
Center sills—AAR Zee . . . . .	31.3 lb. 11/32-in. thick, 18.4 sq. in., high carbon O. H. S., 36,000 lb. min. yield point.	36.2 lb. 13/32-in. thick, 21.3 sq. in. O. H. S., 30,000 lb. min. yield point.
Side sills . . . . .	6 in. by 3 1/2 in. by 1/4 in. H. T. low alloy.	6 in. by 3 1/2 in. by 5/16 in. O. H. S.
Side sill reinf. . . . .	7/32-in. per channel.	6-in. bulb angle O. H. S.
Side plate . . . . .	5/32-in. H. T. low alloy press-ing.	3-in. O. H. S. Zee 2-28.

City, Ind., plant and demonstrated the construction methods used in building the new type of lightweight welded box car recently introduced by this company. Two hundred of these cars are being built of high-tensile low-alloy steel, fabricated mostly by spot and arc welding. They weigh about

35,600 lb. each, a saving in weight of between four and five tons from the conventional A. A. R. standard box car of the same dimensions. In order to produce these cars, a new shop has been erected, and a considerable amount of especially designed automatic welding machinery installed.

Features of the welding processes were explained by guides assigned to various groups as they were conducted through the plant, the construction of 50-ton capacity box cars being followed through from the raw material to the final stages. A comparison of the materials and weights of the new Pullman-Standard welded car and a standard A. A. R. car of equal size and capacity is given in the accompanying table. The wheels of the new car are chilled tread, 695 lb., lightweight design, as recommended by the Association of Chilled Car Wheel Manufacturers and approved by the Association of American Railroads. The inside dimensions of the car are: Width, 9 ft. 2 in.; length, 40 ft. 6 in.; height, 10 ft. 1/2 in.

Included in the group making the inspection were executives, mechanical- and car-department officers and purchasing agents of 50 of the major railroad systems of the United States and Canada.

#### Kerr Urges Government Funds to Make Up Deficits

D. J. Kerr, president of the Lehigh Valley, recently gave his support to a proposed plan that the government pay to the carriers the difference between what they earn and, as he suggested, 3 per cent on their valuation. He offered this scheme as the best solution of present railroad difficulties, in a speech delivered before the annual dinner of the Hazleton (Pa.)

Chamber of Commerce on April 20, and contended that, should such a guaranty be forthcoming, the greater part of the funds would be used to put men back to work. Such a plan, he asserted, would be similar to that in effect in the so-called guaranty period of 1920. It is his opinion that

"there is no other way in which federal money could be used to better advantage in putting men to work, in placing orders for steel and other materials with the heavy industries, and in enabling the railroads to pay interest to the institutional holders of their bonds."

The only alternative, said Mr. Kerr, is higher rates and the reduction of wages to the level of 1936.

The suggestion advanced recently by the three-man committee of I. C. C. members appointed by the President that the roads be permitted to borrow from the R. F. C., Mr. Kerr rejected, on the grounds that, while orders for new equipment would aid the heavy industries, the roads cannot take on additional interest burdens with their present limited revenues. Such proposals as consolidation and co-ordination, he declared, would meet strong opposition from railway labor leaders, who "will insist on some adequate plan to care for the railroad employees displaced by such consolidations." On the whole Mr. Kerr was of the opinion that the committee report "is rather a long range plan . . . which does not give any immediate relief to the railroads or to their employees."

In illustration of his contention that railroad taxes are unduly burdensome, the speaker pointed out that the Delaware, Lackawanna & Western, with a route mileage of 986, pays more taxes annually than the Canadian Pacific pays on its 17,222-mile, coast-to-coast system. New Jersey taxes came in for his especial attention when he quoted a memorandum that that state collected \$9,644 per mile every year from the railroads within its borders, or more per distance-unit than any other state in the union. On the other hand, he pointed out, New Jersey collects less from motor trucks than any state except Massachusetts.

Other unjust burdens also came under his fire. He noted that the Great Northern, when building branches in eastern Montana in 1912 and 1913, was required to put in long span lift bridges, with two systems of raising and lowering, over the Missouri and Yellowstone rivers, although, in the 25 years since the construction of the bridges, not a single commercial vessel has passed through the bridges and the only occasion for raising the bridges was to "allow the government snagboat to clear the channel."

#### **Telegraphers Seek R. L. A. Status for Joint Express Agents**

An effort to place the employment of so-called joint railway and express agents by the Railway Express Agency, Inc., on the same status as regular railroad employees subject to the Railway Labor Act is outlined in a message by E. J. Manion, president of the Order of Railroad Telegraphers, appearing in the current issue of the union organ. It is here announced that every joint agent or employee who receives a monthly transfer allowance in connection with the handling of express matter has been sent a letter embodying the main features of the union president's message, together with an information blank wherein the recipient is asked to state whether he will support the union in

a proposed movement for discontinuance of the handling of express matter by such employees until the Agency "signs with us a reasonable agreement making commission rates as stationary as our railroad wages, and gives us reasonable assurance present joint express agencies will be continued until changes desired are made after conference and agreement between our representative committees and the carriers."

There is also implied in the article a difference between the telegraphers' union and the Brotherhood of Railway & Steamship Clerks regarding the interpretation of what a joint agent is. It is stated that in August, 1937, the clerk's union signed an agreement with the Express Agency intending to cover express workers employed exclusively by the agency, which specifically excepted railroad employees paid on a commission basis receiving a net monthly income of \$125 or less in payment of express agency services. The article points out that both the Agency and the Brotherhood of Railway Clerks have interpreted the agreement to mean that when an employee's net income for the year exceeds the \$125 monthly average, the agency is to be taken from the hands of joint agent and go to an exclusive agent of the Express Agency, who naturally will become a constituent of the Brotherhood of Railway Clerks. It is the purpose of the article to work for the protection of joint agents now in existence and "compel the Railway Express Agency to respect the rights of the men we represent."

The particular bone of contention, it is declared, lies in the fact that the Railway Express Agency took the position several months ago that joint railway-express agents are not its employees within the meaning of the word used in the Railway Labor Act and that it, therefore, has no obligation to make a contract providing rules of working conditions and rates of commission. In support of his contention that the services rendered by joint agents for the Railway Express Agency constitute employment subject to Railway Labor Act, Mr. Manion points out that the National Mediation Board, after investigation, has held that joint railway-express agents are employees of the Railway Express Agency for purposes of the Railway Labor Act. It is further stated that mediation proceedings will shortly be opened by the board for the conclusion of an agreement between the joint agents, as represented by the telegraphers union, and the Railway Express Agency.

#### **Insufficient Evidence to Proceed Against Coal Company Affiliates**

The Interstate Commerce Commission has found that its investigation of the relation between the Pittsburgh Coal Company and its subsidiary railroads—the Montour, the Pittsburgh, Lisbon & Western and the Youngstown & Suburban—did not disclose sufficient evidence to warrant the institution of judicial proceedings to determine whether there had been a violation of the commodities clause of the Interstate Commerce Act. This position, contrary to the recommendation of Examiner Frank E. Mullen's proposed report in the case, was taken "in view

of the present judicial interpretation of that clause."

The report is in No. 27402, an investigation on the commission's own motion into certain acts of the three roads and the Pittsburgh Coal Company, whereby the latter "obtained a new through route by water and rail for the transportation of its coal from Pennsylvania to points in Ohio, principally Youngstown." One of the essential links in the route, from Smith's Ferry to Negley, operated by the Pittsburgh Coal Company, the report goes on to point out, "was constructed as a private facility by that company after we had found that the construction and operation of a railroad between the same points over substantially the same route by the interstate common carrier railroad, the Lisbon, would not be in the public interest and had denied that carrier a certificate of convenience and necessity."

Aside from that noted at the outset the majority made six other findings, summarized in the report as follows:

Finding in *Youngstown & S. Ry. Co. Operation*, 175 I. C. C. 699, that applicant was an interurban electric railway within the meaning of section 1 (22) of the act and not required to obtain a certificate of public convenience and necessity for its operation over the Canfield Branch of the Pennsylvania Railroad in Youngstown, Ohio, reversed; finding made that public convenience and necessity require such operation.

The construction by The Pittsburgh, Lisbon & Western Railroad of extensions of its line south from Negley, Ohio, to the West Darlington Clay Company's plant and to a connection with the Pittsburgh Coal Company's private railroad from Smith's Ferry, Pa., found not unlawful.

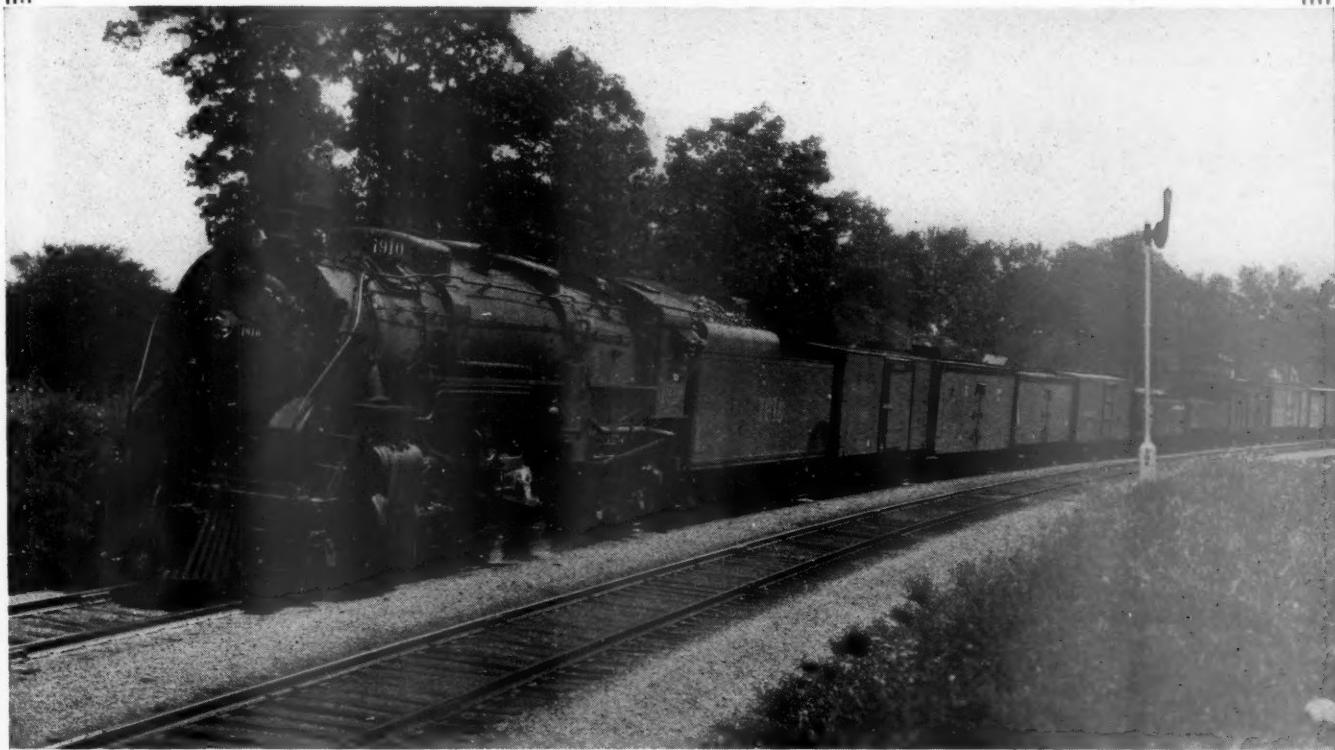
The construction of the said private railroad from Smith's Ferry by the coal company found not in violation of the act nor of our findings and order in *Construction of Branches by Pittsburgh, L. & W. R. Co.*, 150 I. C. C. 43, 619.

The interstate rates of \$1.04 and 60 cents per ton in effect from the Leetonia district to Youngstown and intermediate points found unreasonable to the extent that they exceed or are less than 84 cents per ton, or a rate made 50 cents under the all-rail rate from the Pittsburgh district to the Youngstown group.

The intrastate rate of 60 cents per ton published and maintained by the Lisbon and the Suburban for the transportation of coal from the Leetonia district to Youngstown and intermediate points found to cause undue advantage and preference to persons and localities in intrastate commerce, on the one hand, and undue prejudice and disadvantage to persons and localities in interstate commerce, on the other, and to result in unjust discrimination against interstate commerce. The said undue preference, prejudice, and discrimination ordered removed by the publication and maintenance of an intra-state rate of not less than 84 cents per ton.

Commissioners Eastman and Miller filed dissenting opinions, while Commissioner Meyer's dissent was noted. Commissioners Mahaffie and Rogers did not participate in the disposition of the proceeding. Mr.

# MEASURE RAILROAD PERFORMANCE



## *In Net Tons per Mile of Road per Day*

Full capacity trains at passenger train speeds is the keynote of modern freight train movement. « « « It means increased net tons per mile of road per day—increased usefulness from every factor of the entire transportation plant. « « « Super-Power-Steam-Locomotives alone can do this with maximum efficiency and economy.

LIMA LOCOMOTIVE WORKS



INCORPORATED, LIMA, OHIO

Eastman did not agree with the majority findings as to the Youngstown & Suburban and as to the rates on coal maintained by that road and the Pittsburgh, Lisbon & Western. Commissioner Miller objected to fixing an 84 cent rate for the transportation of coal from the Leetonia district to Youngstown; in his opinion a rate of 90 cents "constitutes the minimum of reasonableness for this service." Also, he thinks that "no valid reason exists for deferring court action," when the facts of record "plainly show" that the construction by the Suburban of its Columbian-Signal extension "without a certificate from us was unlawful."

## Eastman Lets Chips Fall as They May

(Continued from page 776)

all classes of railroad employment, in order that the country may be fully advised of the merits'.

"Not long after, the managements and the employees arrived at a wholly voluntary settlement of the matter, providing for the gradual restoration of the 10 per cent deduction in a comparatively short period of time, so that the appointment of such an investigating commission by the President became unnecessary. The country, therefore, never has been fully advised of the facts through such an investigation. My own view is that the country is entitled to an inquiry of this character, that it would clear the air, and that it ought now to be made.

"In this connection, my correspondence indicates that there exists a rather general impression, which the railroad managements have allowed to be created, that railroad wages are fixed by force of governmental authority. The truth is otherwise. When the railroad managements agreed to a general increase in railroad wages last year, they agreed of their own volition. There is no law which could have compelled them to make such an agreement. The responsibility was theirs, and they should accept it without recourse to alibis.

"The final thing that I want to say about wages is a word of caution to the employees which they have not sought and doubtless will not welcome. Even if an increase in wages can be shown to be just and reasonable on abstract grounds, it does not necessarily follow that it will prove to be of practical advantage. That depends on the time and circumstances, including the immediate ability of the employer to pay. It is quite possible, I fear, that the time and circumstances were not propitious for the increase in railroad wages which was made last year, and that the employees as a whole have not benefited from that increase.

"Turning to the matter of government subsidies, there is nothing novel or unprecedented about such subsidies so far as transportation is concerned. We have been granting them in one way or another ever since the nation began. A direct but limited and temporary subsidy to the railroads under present conditions could be defended.

The present disposition seems to be to rule out such relief, but to resort to government loans made under such conditions and upon such terms that they would amount to a partial and indirect subsidy. If terms can be extended sufficiently favorable to induce the railroads to go into the market for motive power, cars, and shop equipment, such loans can be of positive value both to the railroads and to the country in general. While it is true that the railroads now have a surplus of equipment, nevertheless many of them could gain in both economy and efficiency through a purchase of new and improved types."

## I. C. C. Disposes of Motor Rate Complaint

The Interstate Commerce Commission, Division 5, has found unreasonable but not unjustly discriminatory or unduly prejudicial the class and commodity rates of common carriers by motor vehicle between points in Illinois, Iowa, Eastern Kansas, Missouri and Eastern Nebraska. The same decision, which prescribed a reasonable basis of rates in the foregoing connection, also found the evidence insufficient for a finding with respect to class and commodity rates to and from points in Arkansas, Colorado, Kansas (other than Eastern Kansas), Louisiana, Minnesota, Nebraska (other than Eastern Nebraska), Oklahoma, Tennessee, Texas, Wisconsin and Wyoming. In addition the defendants were directed "to amend certain rules and regulations in their tariffs which contravene the provisions of the Motor Carrier Act, 1935, and our motor freight tariff circular."

The proceeding was docketed as No. MC C-14, Mid-Western Motor Freight Tariff Bureau, Inc., v. Frank Eichholz, doing business as Riteway Motor Service, et al. It grew out of a complaint filed in August, 1936, by the Mid-Western Motor Freight Tariff Bureau, Inc., alleging that the rates maintained by defendants in Riteway Motor Service tariff MF-I. C. C. No. 1 and supplements thereto for the transportation of property in interstate or foreign commerce between points in Arkansas, Colorado, Illinois, Iowa, Kansas, Louisiana, Minnesota, Missouri, Nebraska, Oklahoma, Tennessee, Texas, Wisconsin, and Wyoming are unreasonably low, unduly prejudicial, and unjustly discriminatory in violation of sections 202 (a) and 216 of the Motor Carrier Act, 1935. It was further alleged that certain rules, regulations, and other provisions contained in defendants' tariff were ambiguous, indefinite, and unjustly discriminatory in violation of sections 216 and 217 (b) of the act. Numerous rail and motor carriers and the Missouri Public Service Commission intervened generally in support of the complaint.

After discussion of the issues and setting forth its findings the report says in closing: "The rates prescribed herein are minimum rates only, and the motor carriers are free to, and should where conditions permit, establish higher rates which do not exceed a maximum reasonable basis or otherwise contravene the provisions of the act."

# Equipment and Supplies

## LOCOMOTIVES

THE AKRON, CANTON & YOUNGSTOWN contemplates buying three or four locomotives of the 2-8-2 type.

THE WARRIOR RIVER TERMINAL has ordered one 900-hp. Diesel-electric locomotive from the American Locomotive Company.

## PASSENGER CARS

THE SOUTHERN contemplates purchasing four Diesel-electric passenger units; the type of cars to be bought has not yet been definitely determined.

## IRON AND STEEL

THE ERIE is inquiring for an indefinite tonnage of rails.

THE ILLINOIS CENTRAL has ordered 5,000 tons of rails from the Carnegie Illinois Steel Corporation, the Inland Steel Company and the Tennessee Coal, Iron & Railroad Co.

## Construction

CANADIAN PACIFIC.—A contract has been awarded to Moncrieff & Vistaunet, Vancouver, B. C., for the construction of a three-story fireproof building at Vancouver, which will provide space for additional equipment that is being installed to handle the telegraph and broadcasting business of the Canadian Pacific. The new structure will cost about \$60,000.

NEW YORK CENTRAL—EVANSVILLE, INDIANAPOLIS & TERRE HAUTE.—These companies have applied to the Interstate Commerce Commission for authority to construct a line from Buckskin, Ind., to Dickeyville, 12.3 miles. In the same application the New York Central has asked for authority to operate the line by virtue of the assignment to it of a lease between the Evansville, Indianapolis & Terre Haute and the Cleveland, Cincinnati, Chicago & St. Louis.

PENNSYLVANIA.—The State Highway Commission of Indiana has awarded a contract to the Bontrayer Construction Co., Elkhart, Ind., for the construction of a subway to carry State Highway No. 55 under the tracks of this company at a point 1½ miles southeast of Crown Point. The estimated cost of this project is \$110,000.

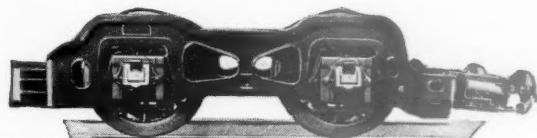
UNION PACIFIC.—Plans have been completed for the construction in the near future of a one-story fireproof mail terminal on the site of the present terminal at Council Bluffs, Iowa, at a cost of about \$200,000. The decision to build the new terminal came after post-office officials announced that the new terminal would be leased for a period of ten years.



# 90 MILE SPEEDS are tough on 60 mile track

Astonishing increases have been made in railroad operating speeds since most of the existing track structures were designed. » » » Higher locomotive speeds impose corresponding increases in track stresses. » » » The larger boilers necessary to provide the additional capacity for high speeds add to driving wheel loads and the track structure suffers. » » » To meet this situation, a new approach has been made to the design of high-speed passenger locomotives. » » » Cylinders, boiler pressure and driving wheels have been proportioned for the work to be done at road speeds, using

as few drivers as practical. » » » Leading and trailing trucks carry a large portion of the locomotive weight, keeping driving wheel loads within proper limits. » » » The deficiency in starting power of this combination is overcome by using Booster power on the trailing wheels. » » » The result is a properly co-ordinated locomotive design. » » » » » » »



Franklin repair parts are made with jigs and fixtures that insure interchangeability, long life and dependability of service. Genuine Franklin parts are a guarantee of maximum trouble-free service.

## FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK

CHICAGO

MONTREAL

## Supply Trade

**The Duff-Norton Manufacturing Company**, Pittsburgh, Pa., has moved its New York sales office from 250 Park avenue to the Empire State building.

**B. J. Herron**, for the past 12 years, general representative in the western section for the **Independent Pneumatic Tool Company**, Chicago, has been placed in charge of a new sales-service branch at 6200 E. Slauson avenue, Los Angeles, Cal.

**William P. Andrews**, assistant manager of sales in the Chicago district of the **Carnegie-Illinois Steel Corporation**, has been appointed manager of sales of the Cincinnati district, succeeding **Lawrence K. Slaback**, deceased.

**T. Lane Watson**, who has been in charge of the bar strip and semi-finished materials division of the **Carnegie-Illinois Steel Corporation** at Chicago, has been promoted to assistant manager of sales of the Chicago district.

At the annual meeting of the **Union Asbestos & Rubber Company** in Chicago on April 21, all directors and officers were re-elected. **Lewis J. Silverman**, secretary and treasurer, was elected executive vice-president and treasurer, and **John H. Balch**, auditor, was elected a director and secretary.

**J. L. Noon**, general railway sales manager of the **Glidden Company**, Cleveland, Ohio, has been appointed manager of its industrial and transportation sales in the United States and Canada, with his headquarters as formerly, at Cleveland. He began work with the company in 1924 as railway salesman in the eastern territory. In 1935, he was appointed eastern railway sales manager and since 1936, when he was transferred to Cleveland, has served as general railway sales manager.

**American Railway Excavators, Inc.**, is a new company which has been formed for the purpose of installing drain and culvert pipe, in railroad and other embankments, by a new process. **W. E. Hicks** is president of the concern and **C. H. Hunnsaker** is vice-president in charge of sales, both having headquarters in the general office of the company, which is located in the Missouri Pacific building, St. Louis, Mo. **W. P. Tobin**, vice-president in charge of operations and treasurer, and **M. O'Connor**, secretary, have their headquarters in a branch office at 220 West Thirty-ninth street, Kansas City, Mo. **E. C. Alexander** is chief engineer, with headquarters at Chicago.

**Charles L. Brown**, western sales manager of the **Locomotive Equipment Division of Manning, Maxwell & Moore, Inc.**, New York, will retire on May 1, at his own request, after 32 years of service. He began work with Manning, Maxwell & Moore, in Chicago, on July 1, 1906, as the company's only representative for

the west and mid-west. Under his guidance, a sales organization was developed for this section, and he became western sales manager. **Robert Watson** succeeds Mr. Brown as western sales manager of the Locomotive Equipment Division, with office in the Field building, Chicago. Mr. Watson was formerly with the Waugh Equipment Company, the Erie railroad and the American Locomotive Company.

**Henry W. Collins**, who has been elected vice-president of the **Celotex Corporation**, was born in 1903 and has been with that corporation since 1923. He started



Henry W. Collins

as a salesman upon leaving Fordham University and was appointed manager of the company's Chicago sales division early in 1927. He became New York sales division manager on November 1, 1936, which position he has held until his recent election.

**J. Z. Hollmann**, who has been promoted to general sales manager, was born in 1896 and has been with the Celotex Corporation since 1926. He was formerly



J. Z. Hollmann

branch manager of the St. Louis sales division, and was appointed assistant general sales manager on November 1, 1936. He is a graduate of Washington State College, Pullman, Wash.

## Financial

**ATLANTIC COAST LINE—LOUISVILLE & NASHVILLE—Bonds and R. F. C. Loan of Carolina, Clinchfield & Ohio.**—The Carolina, Clinchfield & Ohio has applied to the Interstate Commerce Commission for authority to issue and sell to the Reconstruction Finance Corporation its promissory note in the sum of \$14,150,000 to refinance a like amount of its first mortgage 5's due June 1, 1938. As collateral for the loan from the R. F. C., the company will issue \$14,150,000 of its first and consolidated mortgage 5's, series B. The Atlantic Coast Line and the Louisville & Nashville, joint lessees of the road, have asked the commission for authority to guarantee the principal and interest of the bonds and the note.

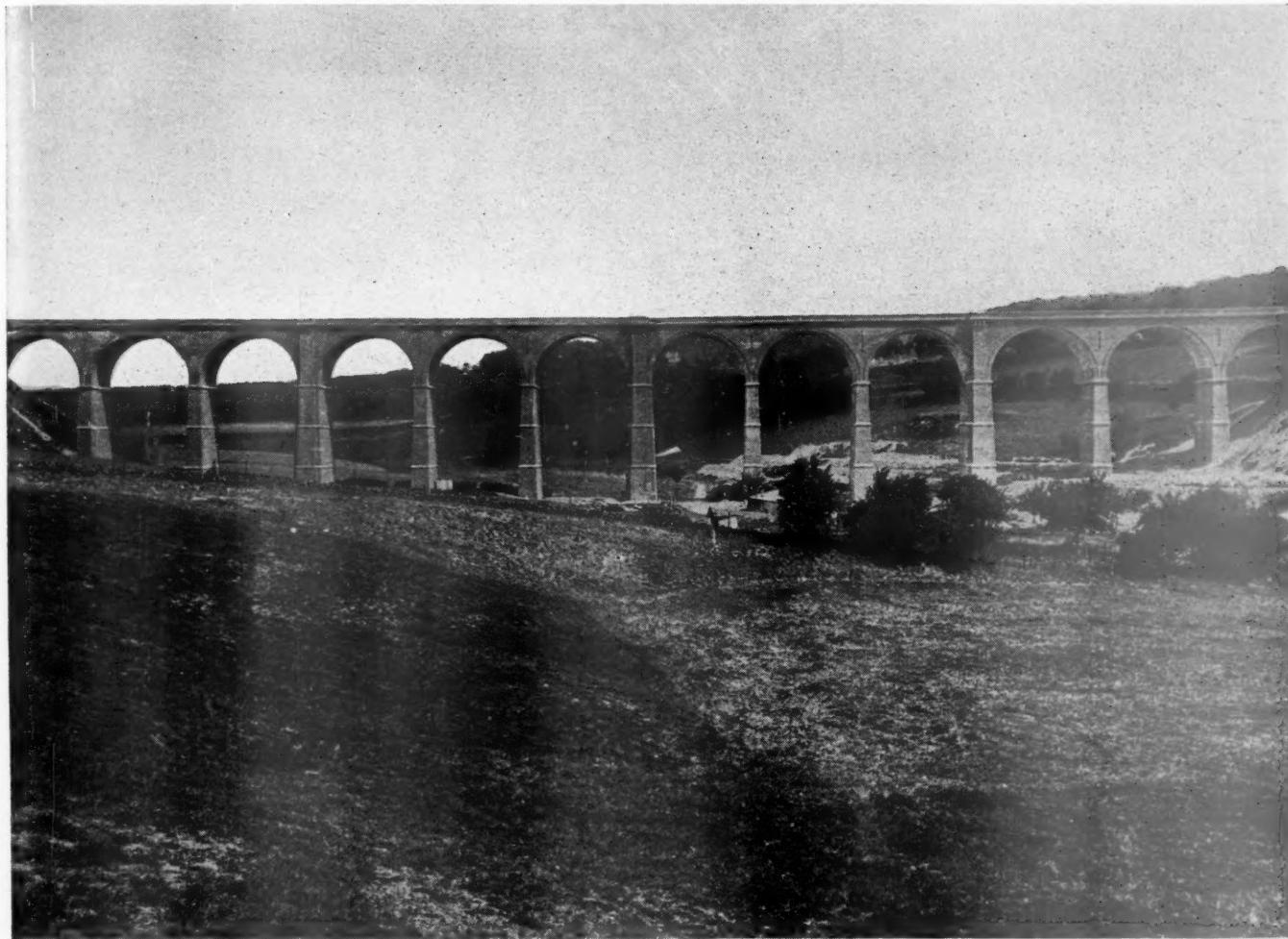
**BELT RAILWAY COMPANY OF CHICAGO.—Annual Report.**—The annual report of this company for the year ended December 31, 1937, shows net income, after interest and other charges, of \$93,753, as compared with net income of \$342,174 in 1936. Selected items from the income statement follow:

	1937	1936	Increase or Decrease
RAILWAY OPERATING REVENUES	\$5,463,926	\$5,372,633	\$91,293
Maintenance of way	506,453	333,345	173,107
Maintenance of equipment	393,798	368,599	25,199
Transportation			
—Rail	2,450,668	2,204,836	245,832
TOTAL OPERATING EXPENSES	3,515,902	3,070,142	445,759
Operating ratio	64.35	57.14	7.21
NET REVENUE FROM OPERATIONS	1,948,024	2,302,490	-354,466
Railway tax accruals	663,640	714,962	-51,322
Railway operating income	1,284,383	1,587,527	-303,144
Net rents	353,823	359,772	-5,948
NET RAILWAY OPERATING INCOME	1,638,207	1,947,299	-309,092
Non-operating income	76,761	85,643	-8,882
TOTAL INCOME	1,714,968	2,032,943	-317,974
Rent for leased roads and equipment	1,616,614	1,687,078	-70,464
TOTAL FIXED CHARGES	1,618,984	1,688,918	-69,934
NET INCOME	\$93,753	\$342,174	-\$248,420

**COLORADO & SOUTHERN—Abandonment.**—A ruling by the federal district court and the Interstate Commerce Commission that the Colorado & Southern may abandon its line from Denver, Col., to Climax, but must continue to operate from Climax to Leadville, was upheld by the United States Tenth District Circuit Court of Appeals at Denver on April 18. Traffic of the Climax Molybdenum Company at Climax moves from Climax to Leadville, where it is transferred to the Denver & Rio Grande Western, and if the entire Denver-Leadville branch of the Colorado & Southern were abandoned, Climax would be without rail transportation.

*Continued on next left-hand page*

## NO. 58 OF A SERIES OF FAMOUS ARCHES OF THE WORLD



## POIX VIADUCT

FRANCE

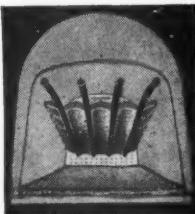
This 226-metre viaduct is situated on the main line between Amiens and Rouen, France. Of brick and stone construction, it is composed of 12 arches, 30 metres above the ground. Originally built in 1866, it was partially destroyed during the World War and was rebuilt in 1919. » » » The Security Sectional Arch for the locomotive firebox, intro-

duced by The American Arch Company, was among the first serious efforts toward fuel economy and increased locomotive capacity. Today the brick arch is essential in the operation of modern steam power, not alone from the standpoint of fuel economy, but the large capacity modern firebox would be impractical without it.

THERE'S MORE TO SECURITY ARCHES THAN JUST BRICK

**HARBISON-WALKER  
REFRACTORIES CO.**

***Refractory Specialists***



**AMERICAN ARCH CO.  
INCORPORATED**

60 EAST 42nd STREET, NEW YORK, N. Y.

***Locomotive Combustion  
Specialists***

**CHICAGO GREAT WESTERN.**—*Annual Report.*—The annual report of this company and its subsidiaries for the year ended December 31, 1937, shows net deficit, after interest and other charges, of \$902,363, as compared with net income of \$371,753 in 1936. Selected items from the consolidated income account follow:

	1937	1936	Increase or Decrease
Average Mileage Operated	1,505.05	1,512.10	-7.05
RAILWAY OPERATING REVENUES	\$18,710,372	\$18,817,001	-\$106,629
Maintenance of way	2,852,226	2,495,222	357,004
Maintenance of equipment	2,812,909	2,506,049	306,859
Transportation	7,232,994	6,953,718	279,276
TOTAL OPERATING EXPENSES	14,261,511	13,217,419	1,044,091
NET REVENUE FROM OPERATIONS Railway tax accruals*	4,448,860	5,599,582	-1,150,721
1,090,965	929,936	161,028	
Railway operating income	3,357,895	4,669,645	-1,311,750
Net rents	2,494,966	2,471,721	23,245
NET RAILWAY OPERATING INCOME	862,928	2,197,923	-1,334,995
Non-operating income	147,405	124,955	22,449
GROSS INCOME	1,010,333	2,322,879	-1,312,545
Rent for leased roads	176,662	177,024	-362
Interest on funded debt	1,634,311	1,668,932	-34,621
TOTAL FIXED CHARGES	1,898,783	1,938,746	-39,962
NET INCOME	+\$902,363	\$371,753	-\$1,274,116

\* Taxes do not include anything for Federal Surtax.  
† Deficit.

**ELGIN, JOLIET & EASTERN.**—*Annual Report.*—The 1937 annual report of this company shows net income, after interest and other charges, of \$1,498,920, as compared with net income of \$1,649,511 in 1936. Selected items from the income account follow:

	1937	1936	Increase or Decrease
RAILWAY OPERATING REVENUES	\$21,340,187	\$19,119,317	\$2,220,870
TOTAL OPERATING EXPENSES	14,919,846	13,118,928	1,800,918
Operating ratio	69.91	68.62	1.29
Railway tax accruals	1,408,685	1,333,390	75,295
Railway operating income	5,011,655	4,666,998	344,657
Equipment and Joint facility rents—Net Dr.	1,288,384	586,694	701,690
NET RAILWAY OPERATING INCOME	3,723,270	4,080,304	-357,033
Non-operating income	168,569	121,863	46,706
GROSS INCOME	3,891,840	4,202,167	-310,326
Rent for leased roads	1,788,231	1,871,812	-83,580
Interest on funded debt	500,000	500,000	.....
NET INCOME	\$1,498,920	\$1,649,511	-\$150,590

**FLORIDA EAST COAST.**—*Annual Report.*—The annual report of this company for the year ended December 31, 1937, shows net deficit, after interest and other charges of \$2,181,952, as compared with net deficit of \$2,071,631 in 1936. Selected items from the income statement follow:

	1937	1936	Increase or Decrease
Average Mileage Operated	684.92	705.34	-20.42
RAILWAY OPERATING REVENUES	\$9,303,205	\$8,614,508	\$688,697
Maintenance of way	1,216,089	1,181,018	35,070
Maintenance of equipment	1,824,425	1,625,897	198,528
Transportation—Rail	3,177,841	2,801,966	375,875
TOTAL OPERATING EXPENSES	7,123,302	6,515,854	607,448
NET REVENUE FROM OPERATIONS Railway tax accruals	2,179,902	2,098,653	81,249
901,160	770,304	130,855	
Railway operating income	1,278,742	1,328,348	-49,606
Hire of equipment—Net Dr.	519,911	435,338	84,573
Joint facility rents—Net Dr.	17,252	15,214	2,038
NET RAILWAY OPERATING INCOME	741,577	877,795	-136,217
Non-operating income	94,525	107,157	-12,632
GROSS INCOME	836,103	984,953	-148,850
Interest on funded debt	2,902,307	2,957,280	-54,972
NET INCOME	+\$2,181,952	+\$2,071,631	-\$110,320

\* Deficit.

**MAINE CENTRAL.**—*Bonds.*—The Interstate Commerce Commission, Division 4, has authorized this company to pledge and repledge from time to time to and including June 30, 1940, as collateral security for a short term note or notes, all or any part of \$1,000,000 of Maine Central and European & North American five per cent first mortgage gold bonds, \$1,675,000 of Portland & Ogdensburg 4½ per cent first mortgage gold bonds, and \$546,500 of general mortgage bonds, series A, 4½ per cent, due December 1, 1960.

**MARYLAND & PENNSYLVANIA.**—*R. F. C. Loan.*—The Interstate Commerce Commission, Division 4, has approved the extension of time of payment for a period ending not later than May 1, 1941, of loans by the Reconstruction Finance Corporation to this company in the amount of \$147,000, maturing May 1, 1938.

**MINNEAPOLIS & ST. LOUIS.**—*Lease by Mound City & Eastern.*—Examiner W. J. Schutrumf of the Interstate Commerce Commission, in a proposed report to the commission, has recommended that it approve a lease of this company's Leola branch extending from Aberdeen, S. Dak., to Leola, 29.6 miles by the Mound City & Eastern.

**MISSOURI-KANSAS-TEXAS.**—*New Director.*—Kenneth J. Hanua, executive vice-president of the Wagner Baking Corporation, has been elected a director of this company to fill a vacancy.

**MOBILE & OHIO.**—*Abandonment by the Warrior Southern.*—Examiner Jerome K. Lyle of the Interstate Commerce Commission, in a proposed report to the commission, has recommended that it authorize the receivers to abandon the operation and the Warrior Southern to abandon the entire line extending from Tidewater, Ala., to Kellerman, 13.7 miles.

**NASHVILLE-FRANKLIN.**—*R. F. C. Loan Denied.*—The Interstate Commerce Commission, Division 4, has denied the application of this company to borrow \$250,000 from the Reconstruction Finance Corporation.

**NEW YORK, NEW HAVEN & HARTFORD.**—*Equipment Trust Certificates.*—The Interstate Commerce Commission, Division 4, has authorized the trustees to assume liability for \$1,640,000 of 3½ per cent equipment trust certificates, maturing in 10 equal annual installments of \$164,000 on April 1 in each of the years from 1939 to 1948, inclusive. The issue has been sold at 99.0562 to a group composed of Salomon Brothers & Hutzler, Dick & Merle-Smith, and Stroud & Co., Inc., making the average annual cost to the company approximately 3.947 per cent.

**PITTSBURGH & WEST VIRGINIA.**—*Annual Report.*—The 1937 annual report of this company shows net income, after interest and other charges, of \$638,540, an increase of \$261,584 as compared with net income in 1936. Selected items from the income account follow:

	1937	Increase or Decrease Compared with 1936
RAILWAY OPERATING REVENUES	\$4,092,691	\$235,790
TOTAL OPERATING EXPENSES	3,165,132	472,893
NET REVENUE FROM OPERATIONS Railway tax accruals	927,559	-237,102
249,272		-48,567
Railway operating income	678,286	-188,535
Hire of Freight Cars—Net Dr.	515,012	70,969
Joint facility rents—Net Dr.	25,347	910
NET RAILWAY OPERATING INCOME	1,142,791	-122,519
Non-operating income	404,216	366,718
GROSS INCOME	1,547,007	244,199
Interest on funded debt	851,561	-36,743
TOTAL DEDUCTIONS FROM GROSS INCOME	908,467	-17,385
NET INCOME	\$638,540	\$261,584

**NEW YORK, SUSQUEHANNA & WESTERN.**—*Reorganization Plan.*—This company has filed with the Interstate Commerce Commission a plan of reorganization under section 77 of the bankruptcy act. The plan, which would wipe out the common and preferred stock, is predicated on the basis of the Terminal First Mortgage bonds, outstanding in the amount of \$2,000,000, being the only mortgage lien on the property it secures. Meanwhile it was determined that securities could be issued in the amount of about \$15,000,000 on the basis of studies which indicated that \$300,000 a year would be available for interest in future years. Thus aside from the above-mentioned \$2,000,000 the plan contemplates a \$2,000,000 issue of new first

# *Some of the Advantages of the New 4-8-4 Type Locomotives for the C. M. St. P. & P. R. R. Co.*

## **MORE HP. PER UNIT of WEIGHT and SIZE**

This efficiency is obtained with a boiler equipped with an Elesco Type "E" superheater. A locomotive boiler equipped with a Type "E" superheater as compared with a Type "A" superheater, effects a substantial increase in evaporative capacity and 50%-80% more superheating capacity.

The ability of the superheater to provide high degrees of superheated steam, however, is dependent upon the entering steam being free of moisture. The Elesco tangential steam dryer assures the flow of dry steam to the superheater. The dryer is attached to the inlet of the dry pipe and separates the moisture from the steam through centrifugal motion, and automatically returns the moisture back to the boiler. The inlet of the dryer is unobstructed and is at the highest point in the dome.

## **A SMOOTH ACTING and WARP-PROOF THROTTLE**

The small steel valves of the American multiple-valve throttle operate at progressive intervals, which insure perfect gradation of the steam to the locomotive cylinders.

The small valves, not being affected by high steam temperatures, insure a **DEPENDABLE** throttle. The throttle is cast integral with the superheated steam compartment of the superheater header and, as compared with other types of throttles, substantially economizes on weight, space and flanged steam joints.



## **THE SUPERHEATER COMPANY**

Representative of AMERICAN THROTTLE COMPANY, INC.

60 East 42nd Street, NEW YORK      122 S. Michigan Avenue, CHICAGO

Canada: THE SUPERHEATER COMPANY, LTD., MONTREAL

Superheaters • Exhaust Steam Injectors • Feed Water Heaters • American Throttles • Pyrometers • Steam Dryers

A-1224

consolidated mortgage bonds, income bonds in the amount of \$2,000,000 and \$9,000,000 in common stock. Equipment trust obligations would remain undisturbed while the Terminal First Mortgage bonds would be extended 30 years. No specific provision is made for the general unpreferred claims, other than those of the Erie, the New Jersey state highway department and the Lehigh & New England. After the allocation of the fixed-interest bonds, the balance of claims would be taken care of on the basis of 13.2 per cent in income bonds and 59 per cent common stock.

**RICHMOND, FREDERICKSBURG & POTOMAC.** *Annual Report.*—The 1937 annual report of this company shows net income, after interest and other charges, of \$980,272, an increase of \$276,112 as compared with net income in 1936. Selected items from the income statement follow:

	Increase or Decrease Compared with 1937	1937	1936
RAILWAY OPERATING REVENUES	\$8,603,220	\$965,191	
TOTAL OPERATING EXPENSES	6,336,809	582,414	
NET REVENUE FROM OPERATIONS	2,266,411	382,777	
Railway tax accruals	687,069	151,526	
Railway operating income	1,579,341	231,250	
Hire of Equipment—Dr. Joint facility rents—Dr.	417,184	-4,307	
	59,590	-20,626	
NET RAILWAY OPERATING INCOME	1,102,567	256,185	
Non-operating income	205,726	23,412	
GROSS INCOME	1,308,294	279,597	
Interest on funded debt*	311,135	....	
TOTAL DEDUCTIONS FROM GROSS INCOME	328,021	3,485	
NET INCOME	\$980,272	\$276,112	

\* Includes dividends on 7% and 6% guaranteed stock.

**ST. LOUIS SOUTHWESTERN.** *Interest Payment.*—The trustee of the St. Louis Southwestern was authorized by the federal district court at St. Louis on April 25 to omit payment of \$400,000 interest, due May 1 on \$20,000,000 of the company's first mortgage bonds. In his application for this authority, the trustee cited the declining revenues of the railroad and said that for the first week of April they were 29 per cent below that of the corresponding week last year, and 26 per cent less in the second week than last year. This is the first suspension of interest payment on Cotton Belt first mortgage bonds, of which there are three series, all maturing November 1, 1989.

**ST. LOUIS SOUTHWESTERN.** *Default on First Mortgage.*—Payment of bond interest on all mortgages of this company has stopped as the result of an order by United States District Judge Charles B. Davis, authorizing Berryman Henwood, trustee, to withhold payment of interest due May 1 on first mortgage bond certificates. The Cotton Belt is now in default on all of its bonds, the court having previously approved non-payment of interest during the trusteeship on the second, third and fourth mortgages, in addition to cer-

tain branch line mortgages. Carleton S. Hadley, assistant general counsel for Trustee Henwood, informed the court that when the trustee's petition for permission to default was drafted, the cash forecast indicated that April revenues would be \$1,403,000, but that figures recently released indicate that the April revenues will be \$1,250,000, a decrease of \$153,000 in the estimate. Revenues for the first week in April were 29 per cent under those for the same week in 1937, and the second week in April showed a 26 per cent decrease.

**SALT LAKE & UTAH.** *Securities.*—The Interstate Commerce Commission, Division 4, has authorized this company to procure the authentication and delivery of \$400,000 of sinking fund first mortgage four per cent bonds, to be pledged as collateral security for a loan by the Reconstruction Finance Corporation, and to issue and sell at not less than par, \$154,000 of noncumulative seven per cent first preferred stock, consisting of 1,540 shares of par value of \$100 a share, and \$55,000 of common stock, consisting of 2,200 shares of \$25 par value, the proceeds to be applied to the cost of acquiring the properties of the Salt Lake & Utah Railroad Company.

**RFC Loan.**—The commission has also approved a loan to this company by the Reconstruction Finance Corporation of \$400,000, to mature in 10 years and the proceeds to be used to purchase the properties of the Salt Lake & Utah Railroad Company.

**SOUTHERN.** *R. F. C. Loan.*—This company has applied to the Reconstruction Finance Corporation for a loan of \$14,000,000, the proceeds to be used to purchase "approximately four Diesel-electric or gasoline passenger trains of one or two units each and approximately 5,000 freight train cars." The petition states that the cost of the trains will be \$500,000 and the cost of the cars \$13,500,000. The passenger and freight equipment is to be financed by separate equipment trusts, the trust on the trains running for 10 years with serial payments starting at the end of two years, and the trust on the freight cars running for 15 years with payments beginning at the end of two years. The trusts will bear interest at not more than four per cent.

**ST. LOUIS SOUTHWESTERN.** *Annual Report.*—The annual report of this company for the year ended December 31, 1937, shows net deficit, after interest and other charges, of \$944,163, as compared with net deficit of \$48,941 in 1936. Selected items from the income statement follow:

	1937	1936	Increase or Decrease
Average Mileage Operated	1,729.55	1,766.98	-37.43
RAILWAY OPERATING REVENUES	\$21,115,982	\$19,363,507	\$1,752,475
Maintenance of way	3,412,746	2,461,053	951,693
Maintenance of equipment	3,538,578	3,103,120	435,457
Transportation	7,001,482	5,852,142	1,149,339
TOTAL OPERATING EXPENSES	15,854,524	13,199,345	2,655,179

Operating ratio	75.08	68.17	6.91
NET REVENUE FROM OPERATIONS	5,261,457	6,164,162	-902,704
Railway tax accruals	1,002,888	1,127,118	-124,230
Railway operating income	4,258,569	5,037,043	-778,474
Net rents—Dr.	2,031,390	1,765,795	265,595
NET RAILWAY OPERATING INCOME	2,227,178	3,271,248	-1,044,069
Non-operating income	93,921	72,658	21,263
TOTAL INCOME	2,321,100	3,343,906	-1,022,806
Rent for leased roads and equipment	3,060	2,843	217
TOTAL FIXED CHARGES	3,248,668	3,382,184	-133,516
NET DEFICIT	\$944,163	\$48,941	\$895,221

**TEXAS & PACIFIC.** *Annual Report.*—The annual report of this company for the year ended December 31, 1937, shows net income, after interest and other charges, of \$2,440,626, as compared with net income of \$2,263,972 in 1936. Selected items from the income account follow:

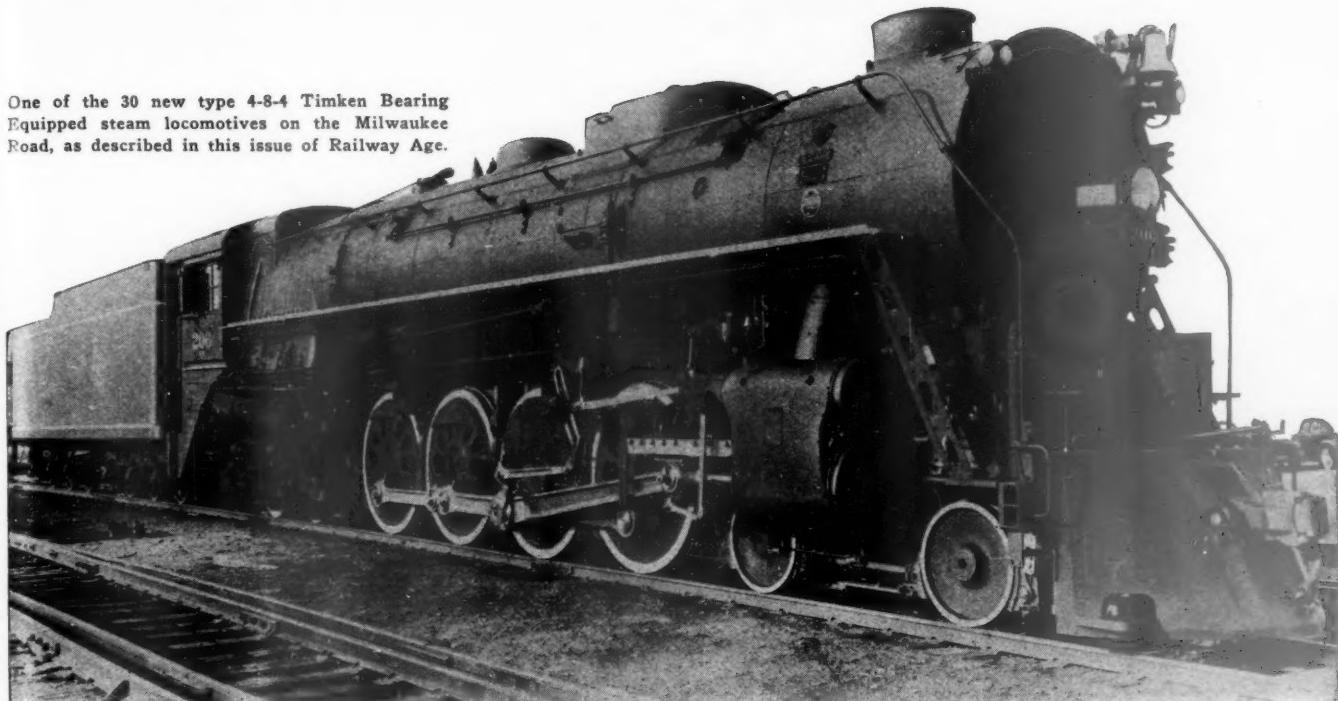
	1937	1936	Increase or Decrease
RAILWAY OPERATING REVENUES	\$30,350,071	\$28,086,676	\$2,263,395
Maintenance of way	3,384,023	3,146,822	237,201
Maintenance of equipment	5,586,317	5,150,180	436,136
Transportation	9,382,967	8,606,528	776,438
Rail			
TOTAL OPERATING EXPENSES	20,924,145	19,472,452	1,451,692
Operating ratio	68.94	69.33	-0.39
NET REVENUE FROM OPERATIONS	9,425,926	8,614,224	811,702
Railway tax accruals	2,347,685	1,881,175	466,510
Railway operating income	7,078,241	6,733,048	345,192
Net rents	1,565,994	1,454,590	111,404
NET RAILWAY OPERATING INCOME	5,512,246	5,278,458	233,787
Non-operating income	1,001,149	1,109,879	-108,730
TOTAL INCOME	6,513,395	6,388,338	125,057
Rent for leased roads and equipment	.....	18,899	-18,899
TOTAL FIXED CHARGES	3,947,408	4,027,922	-80,514
NET INCOME	\$2,440,626	\$2,263,972	\$176,653

**WABASH.** *Annual Report.*—The annual report of this company for the year ended December 31, 1937, shows net deficit, after interest and other charges, of \$3,051,791, as compared with net deficit of \$1,280,781 in 1936. Selected items from the income account follow:

	1937*	1936*	Increase or Decrease
Average Mileage Operated	2,436.88	2,447.11	-10.23
RAILWAY OPERATING REVENUES	\$46,133,734	\$46,428,262	-\$294,528
Maintenance of way	6,039,832	5,340,017	699,814

*Continued on next left-hand page*

One of the 30 new type 4-8-4 Timken Bearing Equipped steam locomotives on the Milwaukee Road, as described in this issue of Railway Age.



## ALL PRINCIPAL TRAINS ON THE MILWAUKEE ROAD ARE EQUIPPED WITH TIMKEN BEARINGS

The Chicago, Milwaukee, St. Paul and Pacific Railroad was one of the first railroads in the world to recognize the value of TIMKEN Roller Bearings, and its "Olympian" and "Pioneer" Limiteds were the first long distance trains to be roller bearing equipped.

Since that time (11 years ago) the Milwaukee Road has used more and more TIMKEN Roller Bearings in all types of equipment. Today ALL of the principal Milwaukee Road Trains are Timken Bearing Equipped. These famous trains include:



**HIAWATHA.** Timken Bearing Equipped streamlined flyer of the Milwaukee Road

HIAWATHA . . . Chicago, Milwaukee, St. Paul, Minneapolis  
 OLYMPIAN . . . Chicago, Milwaukee, Twin Cities, Yellowstone, Butte, Spokane, Seattle, Tacoma  
 PIONEER LIMITED . . . Chicago, Milwaukee, St. Paul, Minneapolis  
 CHIPPEWA . . . Chicago, Milwaukee, Green Bay, Iron Mountain, Channing, Mass., Ontonagon  
 SOUTHWEST LIMITED . . . Chicago, also Milwaukee; Davenport, Excelsior Springs, Kansas City  
 ARROW . . . Chicago, also Milwaukee; Des Moines, Omaha, Sioux City, Sioux Falls  
 TOMAHAWK . . . Chicago, Milwaukee, Wisconsin Rapids, Wausau, Merrill, Tomahawk, Minocqua  
 MARQUETTE . . . Chicago, Janesville, Madison, Charles City, Mason City  
 COPPER COUNTRY LIMITED . . . Chicago, Milwaukee, Green Bay, Iron Mountain, Iron River, Calumet, Sault Ste. Marie  
 SIOUX . . . Chicago, Milwaukee, Madison, Mason City, Sioux Falls, Mitchell, Rapid City

The latest Milwaukee Road equipment to go on TIMKEN Bearings comprises 30 type 4-8-4 steam locomotives recently placed in service, also 6 type 4-6-4 steam locomotives, (all driving axles and engine trucks) and 35 Hiawatha type cars just ordered.

THE TIMKEN ROLLER BEARING COMPANY, CANTON, OHIO

Manufacturers of TIMKEN Tapered Roller Bearings for automobiles, motor trucks, railroad cars and locomotives and all kinds of industrial machinery; TIMKEN Alloy Steels and Carbon and Alloy Seamless Tubing; TIMKEN Rock Bits; and TIMKEN Fuel Injection Equipment.

**TIMKEN**  
**RAILWAY ROLLER BEARINGS**

Maintenance of equipment	8,334,097	8,273,354	60,742
Transportation	17,868,059	17,140,848	727,210
—Rail			
TOTAL OPERATING EXPENSES	35,829,683	34,334,112	1,495,570
Operating ratio	77.66	73.95	3.71
NET REVENUE FROM OPERATIONS	10,304,050	12,094,149	-1,790,098
Railway tax accruals	2,453,482	2,363,589	89,893
Railway operating income	7,850,568	9,730,560	-1,879,992
Net rents	3,602,712	3,583,038	19,673
NET RAILWAY OPERATING INCOME	4,247,856	6,147,521	-1,899,665
Non-operating income	422,205	367,890	54,314
GROSS INCOME	4,670,061	6,515,412	-1,845,350
Rent for leased roads and equipment	364,297	361,653	2,644
Interest on funded debt	6,801,204	6,906,979	105,775
TOTAL FIXED CHARGES	7,614,578	7,721,395	-106,816
NET DEFICIT	\$3,051,791	\$1,280,781	\$1,771,002

\* Combined Corporate and Receivers' Accounts.

**WHEELING & LAKE ERIE.**—*Annual Report.*—The annual report of this company for the year ended December 31, 1937, shows net income, after interest and other charges, of \$3,735,466, as compared with net income of \$3,744,278 in 1936. Selected items from the income account follow:

	1937	1936	Increase or Decrease
RAILWAY OPERATING REVENUES	\$15,970,838	\$15,574,200	\$396,638
TOTAL OPERATING EXPENSES	11,172,293	10,892,349	279,944
Operating ratio	69.95	69.94	.01
NET REVENUE FROM OPERATIONS	4,798,545	4,681,850	116,695
Railway tax accruals	1,751,898	1,562,033	189,865
Railway operating income	3,046,647	3,119,816	-73,169
Net rents—Cr.	1,175,575	631,815	543,760
NET RAILWAY OPERATING INCOME	4,222,222	3,751,632	470,590
Non-operating income	164,351	643,906	-479,555
TOTAL INCOME	4,386,573	4,395,539	-8,966
Interest on funded debt	634,345	607,069	27,276
TOTAL FIXED CHARGES	637,119	638,808	-1,689
NET INCOME	\$3,735,466	\$3,744,278	-\$8,812

#### Average Prices of Stocks and Bonds

	Last Apr. 26	Last week	Last year
Average price of 20 representative railway stocks..	22.87	22.61	56.35
Average price of 20 representative railway bonds..	55.30	54.49	80.77

#### Dividends Declared

Bangor & Aroostook.—62c, quarterly; Preferred, \$1.25, quarterly, both payable July 1 to holders of record May 31.

Pittsburgh, Bessemer & Lake Erie.—6 Per Cent Preferred, \$1.50, semi-annually, payable June 1 to holders of record May 14.

Norfolk & Western.—\$2.50, quarterly, payable June 18 to holders of record May 31.

Reading Company.—First Preferred, 50c, payable June 9 to holders of record May 19.

## Railway Officers

### EXECUTIVE

**R. W. Clark**, whose promotion to the newly-created position of vice-president in charge of traffic of the Northern Pacific, with headquarters at St. Paul, Minn., was



R. W. Clark

reported in the April 23 issue of the *Railway Age*, was born in Petoskey, Mich., on October 4, 1880, and started his railroad career with the Northern Pacific in 1902 as a stenographer in the chief engineer's office. In 1903, he was transferred to the president's office and in 1904, he was promoted to chief clerk in that office. In 1907, he was further advanced to assistant to the president, which position he held until 1918. During the war he served as assistant to the federal manager of the Northern Pacific and in 1920, when the carriers were returned to their owners, he resumed the title of assistant to the president. In 1927, Mr. Clark was appointed general traffic manager, which position he held until his recent promotion.

### FINANCIAL, LEGAL AND ACCOUNTING

**J. J. Danhof**, general counsel of the New York Central, has been appointed also general counsel of the Detroit Terminal Railroad Company.

**Richard W. Sharpless**, director of the motor vehicle department of the Indiana Public Service Commission, has resigned to become an attorney for the Western Association of Railway Executives, with headquarters at Chicago.

**Leroy W. Wing**, assistant paymaster of the Pere Marquette, has been promoted to paymaster, with headquarters at Detroit, Mich., succeeding Fred H. Dean, who has retired after almost 50 years' service with the Pere Marquette.

### OPERATING

**M. J. Byrnes**, who has been appointed assistant to the operating vice-president of

the Northern Pacific, with headquarters at St. Paul, Minn., as reported in the *Railway Age* of April 9, was born at St. Paul on December 1, 1884. He received his education in the high school and the College of St. Thomas there, and entered the employ of the Northern Pacific in December, 1902, as clerk to the superintendent of transportation. After advancing to stenographer in 1905, he became chief clerk to the superintendent in 1912, and was chief clerk to the general superintendent and general manager from 1917 to 1921. He then served in the same capacity to the assistant to the vice-president until 1926, when he was appointed supervisor of wages, which position he held up to the time of his recent appointment.

**Frank H. Allard**, who has been appointed assistant to the chief operating officer of the Chicago, Milwaukee, St. Paul & Pacific, effective May 1, as reported in the *Railway Age* of April 23, is a native of St. Paul, Minn. Mr. Allard began his railroad career in 1901 as a locomotive fireman on the Milwaukee, later becoming a trainman and in 1911 a conductor at Dubuque, Iowa. He was promoted to trainmaster in 1918, and served in this capacity successively at Beloit, Wis., Savanna, Ill., and Ottumwa, Iowa. In 1924, he was appointed assistant to C. M. Dukes, then assistant to the general manager, and continued as assistant to Mr. Dukes when the latter became assistant to the operating vice-president and thence assistant to



Frank H. Allard

the chief operating officer. Mr. Dukes having now retired, Mr. Allard succeeds him as assistant to the chief operating officer.

**Thomas Hilliard Martin** has been appointed superintendent of traffic and transportation, Canadian National Express, with headquarters at Montreal, Que. The position of traffic manager has been abolished, and **Hugh Edgar Hislop**, who held that position, has been appointed superintendent, Southwestern Ontario division, with headquarters at Toronto, Ont., succeeding the late **Charles Grasley**. All classification and tariff matters will hereafter be handled by Mr. Martin.

Mr. Martin was born at Hamilton, Ont., on March 27, 1900, and entered the service of the Canadian Northern Express

Company as a clerk at Toronto in 1917. He held various clerical positions at Toronto and West Toronto until he was trans-



T. H. Martin

ferred to the office of the general manager at Montreal as traffic clerk, in 1922. He was appointed assistant chief clerk in the office of the general manager in 1929, which position he held until his present appointment as superintendent of traffic and transportation.

Mr. Hislop was born at Smith Falls, Ont., on August 12, 1894, and joined the Canadian Northern Express Company at Smith Falls as a wagonman in 1914, being transferred to the clerical staff at that point later in the same year. He was promoted to the position of chief clerk at Ottawa in 1918, was transferred to Toronto as claims clerk in 1919 and appointed chief clerk in the claims office in 1921. He was appointed chief clerk to the general superintendent at Moncton, N. B., in 1922. In 1923 he was transferred to the office of the general manager at Montreal as general clerk and was made chief clerk in 1931. Mr. Hislop was appointed traffic manager



H. E. Hislop

at Montreal in 1931, which position he held until his recent appointment as superintendent of the Southwestern Ontario division.

**Edward E. Hamilton**, who has been appointed general superintendent of the Minneapolis & St. Louis, with headquarters at Minneapolis, Minn., as reported in

the *Railway Age* of April 23, was born on October 1, 1879, at Cumberland, Md., and first entered railway service in June, 1894, as a messenger and student telegrapher on the Baltimore & Ohio at Cumberland, Md. During the ensuing 24 years, Mr. Hamilton held various positions with this company, including those of acting trainmaster, chief clerk to general manager, chief clerk to vice-president (operations), and supervisor, operating statistics. At the end of this period, he became assistant to the federal manager, Allegheny region, of the United States Railroad Administration. In 1919, Mr. Hamilton left railroad service to go with the Philadelphia Company, Pittsburgh, Pa., and for the next seven years he served in executive capacities with various subsidiary companies of this concern. At the end of this period, he became assistant to the vice-president of the United Gas Improvement Company, Philadelphia, Pa., and, after about six years in this capacity, he returned to railroad service as executive assistant on



Edward E. Hamilton

the Missouri-Kansas-Texas. From January, 1936, to July 1 of the same year, Mr. Hamilton was connected with the staff of the federal co-ordinator of transportation. At the end of this period he again returned to railroad service as a special representative on the Minneapolis & St. Louis, holding this position until his recent appointment as general superintendent.

#### TRAFFIC

**P. A. Aulenbacher** has been appointed general agent on the Union Pacific at Seattle, Wash., effective May 1, succeeding **W. S. Elliott**, who retired on that date.

**Z. P. Hawkins**, assistant general freight agent of the Columbus & Greenville, with headquarters at Winona, Miss., has been appointed assistant traffic manager, with the same headquarters, effective May 1.

**Norman H. Asp**, general agent for the refrigerator department of the Atchison, Topeka & Santa Fe, with headquarters at Los Angeles, Cal., has been appointed assistant manager of this department, with the same headquarters, succeeding **S. M. Fulton**, who is retiring after over 40 years of service with the Santa Fe. **William J. Mattern**, traveling agent in the re-

frigerator department, has been promoted to general agent in that department, with headquarters at San Francisco, Cal.

**J. B. Rayn**, assistant general freight agent for the Chicago, Rock Island & Pacific at Chicago, effective May 1, has been appointed to the newly-created position of general agent at Duluth, Minn. **J. Merrow, Jr.**, division freight agent at Chicago, succeeds Mr. Rayn as assistant general freight agent at that point.

**Fred N. Hicks**, western traffic manager of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Seattle, Wash., has been promoted to passenger traffic manager, with headquarters at Chicago, to succeed **L. M. Jones**, who died on March 30, as reported in the *Railway Age* of April 2. **Eugene B. Finegan**, freight traffic manager with headquarters at Chicago, has been appointed to the newly-created position of assistant chief traffic officer, with the same headquarters.

**Roy W. Nelson**, whose appointment as assistant traffic manager of the Minneapolis & St. Louis, with headquarters at New York, was reported in the *Railway Age* of April 23, was born at Minneapolis, Minn., on September 20, 1898. He entered the service of the M. & St. L. on July 24, 1914, in the freight claim department at Minneapolis, advancing through various positions to that of over short and damage investigator in 1917. On August 28, 1918, Mr. Nelson left the M. & St. L. to enter the World war in the naval service. On January 2, 1919, he returned to the M. & St. L., serving again in the freight claim department until February 1, 1921, when he was transferred to the freight claim prevention department, returning to the freight claim department on August 9, 1923, as chief clerk. On January 18, 1926, he was appointed chief clerk in the traffic department at Minneapolis, and after nine

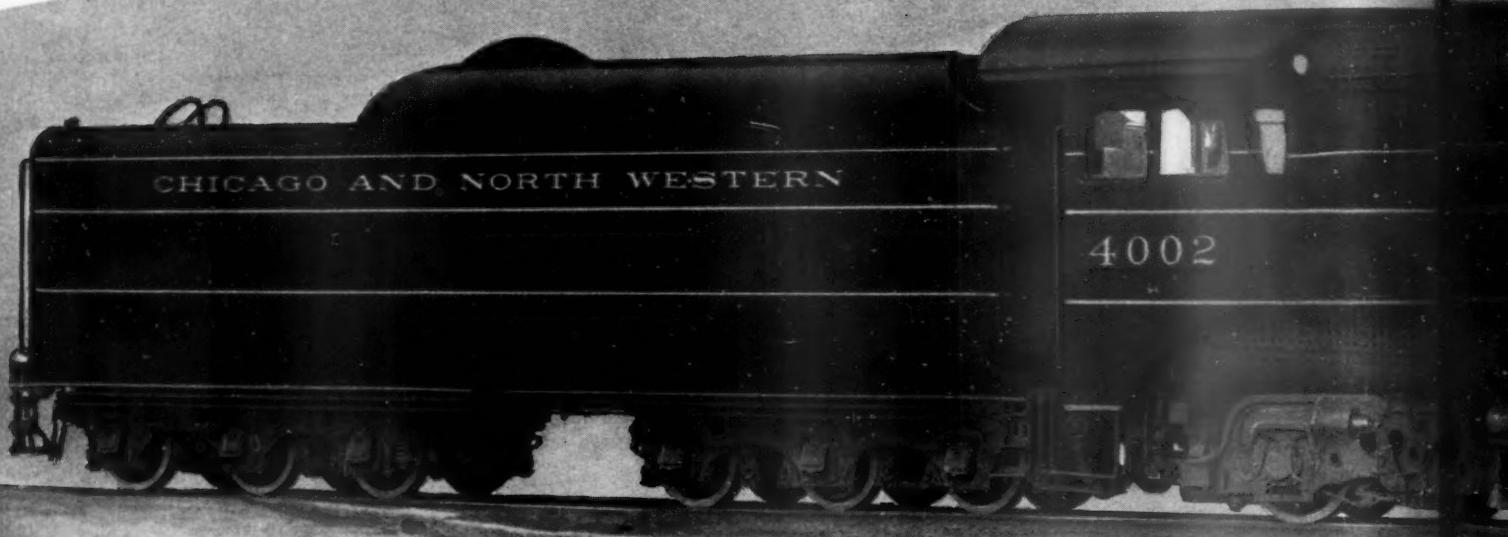


Roy W. Nelson

years in this capacity he was promoted to general agent at St. Paul, Minn., being transferred to New York on May 1, 1937, where he remained until his recent promotion to assistant traffic manager, with the same headquarters.

**H. W. Ward**, who has been appointed general traffic manager of the Minneapolis & St. Louis, with headquarters as before

# 9 NEW *Steam*



## POWER

55,000 pounds Tractive Power

## SPEED

84" Drivers

## NEW POWER - NEW PROFITS

Weight on Drivers . . . 216,000 pounds  
Weight of Engine . . . 412,000 pounds  
Cylinders . . . . . 25x29 inches

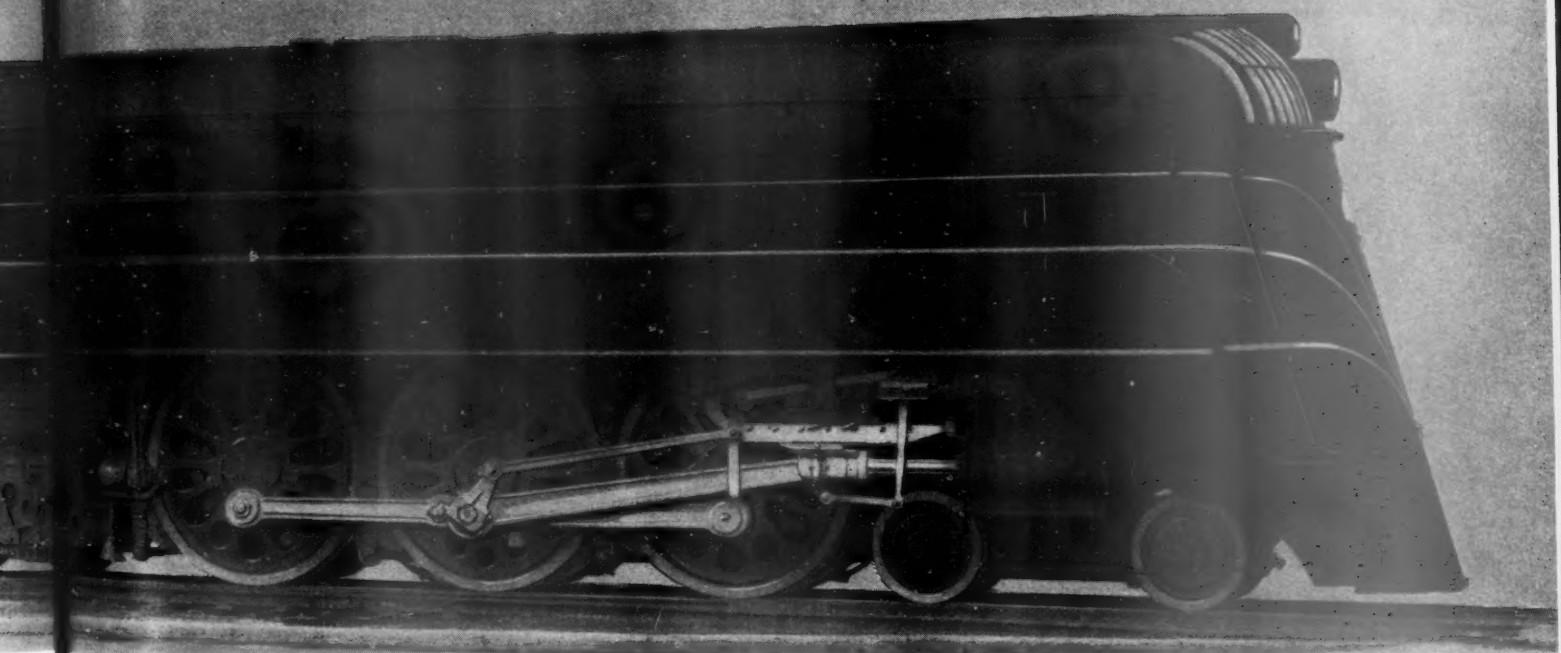
Diameter of Drivers . . . . . 84 inches  
Boiler Pressure . . . . . 300 pounds  
Tractive Power . . . . . 55,000 pounds

AMERICAN LOCOMOTIVE COMPANY  
30 CHURCH STREET

# liners

for the

## CHICAGO AND NORTH WESTERN



**N**INE new streamlined locomotives of the 4-6-4 type have been completed for the Chicago and North Western to speed up the heavy passenger trains between Chicago and Omaha. The trains in this service, usually consisting of 14 to 16 cars, have outgrown the capacities of the existing 4-6-2 engines which previously hauled them.

The new streamlined locomotives, attractively sheathed and painted to harmonize with the new cars also operating in this service, develop maximum possible power obtainable with three driving axles.

EMPLOYEE COMPANY  
OF THE NEW YORK & N.Y.

at Minneapolis, Minn., as noted in the *Railway Age* of April 23, was born at Spooner, Wis., on April 23, 1894. He was educated at the Minnesota College of Law, receiving the degree of LL.B. in 1934, and was admitted to the bar in October of the



H. W. Ward

same year. He began railway service in October, 1908, in the tariff department of the M. & St. L. Two years later he went with the Chicago, St. Paul, Minneapolis & Omaha as a clerk in the local freight office at Minneapolis, and then served from 1911 to 1924 as brakeman and freight conductor. He returned to the traffic department of the Omaha as traveling freight agent at Duluth, Minn., and became soliciting agent at Minneapolis in 1930. He was appointed general freight agent in charge of solicitation for the M. & St. L. in March, 1935, and was made acting traffic manager in April, 1936. He became traffic manager in August of that year, and held this position until his recent appointment.

**J. B. Helwig**, whose appointment as assistant traffic manager of the Minneapolis & St. Louis with headquarters at Los Angeles, Cal., was noted in the April



J. B. Helwig

23 issue of the *Railway Age* was born at Cincinnati, Ohio, on September 30, 1888. Mr. Helwig entered the service of the M. & St. L. on February 1, 1911, as contract-

ing agent in the traffic department at Cincinnati, and on May 1, 1915, he was promoted to traveling freight agent, with headquarters at the same point, which position he was holding when he left the M. & St. L. on May 1, 1918 to enter the World war. On March 1, 1920, he returned to the M. & St. L. as general agent at Cincinnati, and served in this position until February 1, 1925, when he was transferred to Los Angeles, Cal., as general agent. On September 1, 1935, Mr. Helwig was again promoted, this time to assistant general freight agent at Los Angeles, which position he was holding at the time of his recent promotion to assistant traffic manager, with the same headquarters.

the Bonne Carre Spillway bridges of the Illinois Central and the Yazoo & Mississippi Valley, the reconstruction of the south approach to the Ohio River bridge at Cairo, Ill., the construction of the company's extensive locomotive repair facilities at Paducah, Ky., and the prosecution of an extensive track elevation project at Jackson, Miss. For many years he has been active in the affairs of the American Railway Engineering Association, serving as a director from 1924 to 1926, and treasurer from 1930 to date. Altogether he has served on eight different committees of the A. R. E. A. and has been vice-chairman of the Committee on Rail since 1929.

## MECHANICAL

**T. Olson**, master mechanic of the Chicago Great Western, with headquarters at Oelwein, Iowa, effective May 1, has been appointed superintendent of motive power with the same headquarters, succeeding **H. W. Reinhardt**, who has resigned. **J. P. Becker**, general locomotive and boiler inspector at Oelwein, has been appointed master mechanic at Oelwein to succeed Mr. Olson.

**Alex B. Colville**, who has been appointed superintendent of motive power of the Great Northern, with headquarters at Spokane, Wash., as reported in the *Railway Age* of April 9, was born in Scotland on December 22, 1883. He began railway service with the Great Northern on October 25, 1898, as a boilermaker apprentice at Spokane, becoming a machinist apprentice a year later and advancing to machinist in October, 1903. He was made shop foreman of the Hillyard (Wash.) shops in June, 1907, but left the Great Northern in October, 1915, to become general foreman on the Spokane, Portland & Seattle (controlled jointly by the Great Northern and the Northern Pacific) at Portland, Ore. On September 1, 1917, Mr. Colville returned to the Hillyard shops of the Great Northern as general foreman, and served in that position until March 1, 1935, when he was made superintendent of these shops, which position he was holding at the time of his recent promotion.



A. F. Blaess

nection was with the Detroit & Mackinac, which company he left in 1897 to go with the Illinois Central as a track apprentice. After several months in this capacity he was made a rodman, later serving as a transitman. In 1900, he was made a resident engineer and after a year in this capacity he was promoted to assistant engineer. From 1902 to 1905, Mr. Blaess served as a track supervisor, and in the latter year he was further promoted to roadmaster. After five years in this capacity he was made assistant engineer maintenance of way, and in 1913 he was appointed district engineer. In the following year he was promoted to engineer maintenance of way and held this position for 11 years. He has served as chief engineer since 1925. During his period of service as chief engineer Mr. Blaess had supervision over a number of major engineering projects, including the construction of the 169-mile Edgewood cut-off, the building of

## OBITUARY

**W. K. Williams**, research counsel of the Pere Marquette, with offices at Detroit, Mich., died on April 26.

**John T. McShane**, formerly division superintendent on the Chicago, Burlington & Quincy at Sterling, Col., died of pneumonia on April 17. Mr. McShane had been out of railroad service since 1918, and at the time of his death he was vice-president of the Morse Brothers Machinery Company, Denver, Col.

**C. E. Chamberlin**, former superintendent of the Reading division of the Reading, died on April 2, in his 65th year. Mr. Chamberlin was superintendent of the Reading division from July 1, 1933, to September 1, 1936, when he was appointed special representative in the operating department at Reading, Pa., from which position he was retired on December 31, 1937.

# UNION PACIFIC RAILROAD COMPANY

## Forty-First Annual Report—Year Ended December 31, 1937

### To THE STOCKHOLDERS OF UNION PACIFIC RAILROAD COMPANY:

The Board of Directors submits the following report for the year ended December 31, 1937, of the operations and affairs of the Union Pacific Railroad Company, including lines leased from Oregon Short Line Railroad Company, Oregon-Washington Railroad & Navigation Company, Los Angeles & Salt Lake Railroad Company and The St. Joseph and Grand Island Railway Company. The lessor companies have certain income and charges, and the figures in the Income Account, other than those relating to transportation operations, and in the Profit and Loss

Account and General Balance Sheet and tabulations and tables relating thereto are stated on a consolidated basis, *excluding offsetting accounts between the companies, except as otherwise noted.*

### Income

The operated mileage at close of year and income for the year 1937, compared with 1936, were as follows:

	1937	1936	INCREASE	DECREASE
Miles of road .....	9,911.69	9,918.01	..... .76	6.32
Miles of additional main track .....	1,542.71	1,541.95	..... .76	
Miles of yard tracks and sidings .....	4,282.84	4,262.52	20.32	
<b>Total Mileage Operated .....</b>	<b>15,737.24</b>	<b>15,722.48</b>	<b>14.76</b>	
<b>Transportation Operations</b>				
Operating revenues .....	\$162,064,310.60	\$155,213,582.83	\$6,850,727.77	
Operating expenses .....	116,834,578.21	108,728,114.40	8,106,463.81	
Revenues over expenses .....	\$45,229,732.39	\$46,485,468.43	..... \$187,121.23	\$1,255,736.04
Taxes .....	13,244,160.11	13,057,038.88		
<b>Railway Operating Income .....</b>	<b>\$31,985,572.28</b>	<b>\$33,428,429.55</b>	<b>..... \$118,000.39</b>	<b>\$1,442,857.27</b>
Rents from use of joint tracks, yards, and terminal facilities .....	1,732,739.70	1,614,739.31		
Hire of equipment—debit balance .....	\$33,718,311.98	\$35,043,168.86	.....	\$1,324,856.88
Rents for use of joint tracks, yards, and terminal facilities .....	\$8,562,894.10	\$7,721,865.65	\$841,028.45	
Miscellaneous rents .....	2,269,157.65	2,250,676.63	18,481.02	
Miscellaneous income .....	\$10,832,051.75	\$9,972,542.28	\$859,509.47	
<b>Net Income from Transportation Operations .....</b>	<b>\$22,886,260.23</b>	<b>\$25,070,626.58</b>	<b>.....</b>	<b>\$2,184,366.35</b>
<b>Income from Investments and Sources other than Transportation Operations</b>				
Income from oil operations in Southern California—net .....	\$428,521.24	\$428,521.24		
Dividends on stocks owned .....	4,228,302.62	\$7,149,689.54	.....	\$2,921,386.92
Interest on bonds, notes, and equipment trust certificates owned .....	3,765,484.99	4,129,302.35	.....	363,817.36
Interest on loans and open accounts—balance .....	101,365.80	122,454.01	.....	21,088.21
Rents from lease of road and equipment .....	228,634.26	120,321.18	108,313.08	
Miscellaneous rents .....	345,811.72	335,133.35	10,678.37	
Miscellaneous income .....	538,291.39	*558,083.14	.....	19,791.75
<b>Total .....</b>	<b>\$9,636,412.02</b>	<b>*\$12,414,983.57</b>	<b>.....</b>	<b>\$2,778,571.55</b>
<b>Total Income .....</b>	<b>\$32,522,672.25</b>	<b>*\$37,485,610.15</b>	<b>.....</b>	<b>\$4,962,937.90</b>
<b>Fixed and Other Charges</b>				
Interest on funded debt .....	\$14,188,163.76	\$14,588,642.87	.....	\$400,479.11
Miscellaneous rents .....	28,422.49	12,947.67	\$15,474.82	
Miscellaneous charges .....	650,569.78	*675,484.81	.....	24,915.03
<b>Total .....</b>	<b>\$14,867,156.03</b>	<b>*\$15,277,075.35</b>	<b>.....</b>	<b>\$409,919.32</b>
<b>Net Income from All Sources .....</b>	<b>\$17,655,516.22</b>	<b>\$22,208,534.80</b>	<b>.....</b>	<b>\$4,553,018.58</b>
<b>DISPOSITION OF NET INCOME</b>				
Dividends on Stock of Union Pacific Railroad Co.:				
Preferred stock:				
2 per cent paid April 1, 1937 .....	\$1,990,862.00			
2 per cent paid October 1, 1937 .....	1,990,862.00	\$3,981,724.00	\$3,981,724.00	
Common stock:				
1½ per cent paid April 1, 1937 .....	\$3,334,365.00			
1½ per cent paid July 1, 1937 .....	3,334,365.00			
1½ per cent paid October 1, 1937 .....	3,334,365.00	13,337,460.00	13,337,460.00	
1½ per cent payable January 3, 1938 .....	3,334,365.00			
<b>Total Dividends .....</b>	<b>\$17,319,184.00</b>	<b>\$17,319,184.00</b>	<b>.....</b>	
<b>Surplus, Transferred to Profit and Loss .....</b>	<b>\$336,332.22</b>	<b>\$4,889,350.80</b>	<b>.....</b>	<b>\$4,553,018.58</b>

\* Restated.

### Expenditures Chargeable to Investment in Road and Equipment

Extensions and Branches .....	\$386.11	Credits to Investment in Road and Equipment for retirements:
Additions and Betterments (excluding equipment) .....	4,268,174.57	Cost of property retired and not replaced .....
Equipment .....	20,650,043.50	Cost of equipment retired .....
<b>Total Expenditures .....</b>	<b>\$24,918,604.18</b>	<b>\$1,638,922.84</b>
		2,904,751.35
		Total Credits .....
		\$4,543,674.19
		Net increase in "Investment in Road and Equipment" ....
		\$20,374,929.99

### Operating Results for Year 1937 Compared with Year 1936

	1937	1936	INCREASE	DECREASE	PER CENT
Average miles of road operated .....	9,913.82	9,859.80	54.02	.....	.5
<b>OPERATING REVENUES</b>					
1. Freight .....	\$130,685,961.16	\$126,916,645.53	\$3,769,315.63	.....	5.0
2. Passenger .....	17,320,897.81	15,062,417.05	2,258,480.76	.....	15.9
3. Mail .....	4,996,449.96	4,796,753.91	199,696.05	.....	4.2
4. Express .....	2,112,937.79	2,116,577.87	.....	\$3,640.08	2
5. Other passenger-train .....	2,948,967.71	2,593,867.54	355,100.17	.....	13.7
6. Switching .....	1,513,613.33	1,470,484.80	43,128.53	.....	2.9
7. Water line .....	13,148.92	7,487.46	5,661.46	.....	75.6
8. Other .....	2,472,333.92	2,249,348.67	222,985.25	.....	9.9
9. Total operating revenues .....	<b>\$162,064,310.60</b>	<b>\$155,213,582.83</b>	<b>\$6,850,727.77</b>	.....	4.4
<b>OPERATING EXPENSES</b>					
10. Maintenance of way and structures .....	\$17,725,359.91	\$16,927,970.72	\$797,389.19	.....	4.7
11. Maintenance of equipment .....	30,309,226.12	29,090,749.04	1,218,477.08	.....	4.2
12. Total maintenance .....	\$48,034,586.03	\$46,018,719.76	\$2,015,866.27	.....	4.4
13. Traffic .....	4,666,453.43	3,835,288.30	831,165.13	.....	21.7
14. Transportation—rail line .....	54,657,836.31	49,194,353.55	5,463,482.76	.....	11.1
15. Transportation—water line .....	10,960.08	6,088.22	4,871.86	.....	80.0
16. Miscellaneous operations .....	3,625,438.82	3,166,226.68	459,212.14	.....	14.5
17. General .....	5,840,263.57	6,507,726.27	.....	\$667,462.70	10.3
18. Transportation for investment—Credit .....	960.03	288.38	671.65	.....	232.9
19. Total operating expenses .....	<b>\$116,834,578.21</b>	<b>\$108,728,114.40</b>	<b>\$8,106,463.81</b>	.....	7.5
20. Revenues over expenses .....	<b>\$45,229,732.39</b>	<b>\$46,485,468.43</b>	.....	<b>\$1,255,736.04</b>	2.7
<b>TAXES</b>					
21. State and county .....	\$9,540,231.90	\$8,903,216.93	\$637,014.97	.....	7.2
22. Unemployment insurance—Federal and State .....	1,367,169.05	624,742.62	742,426.43	.....	118.8
23. Federal income .....	1,935,018.01	1,347,610.40	587,407.61	.....	43.6

(This table continued at top of opposite page)

### General Balance Sheet—Assets

	December 31, 1937	December 31, 1936	INCREASE	DECREASE
<b>Investments:</b>				
ROAD AND EQUIPMENT .....	\$959,461,224.64	\$939,086,294.65	\$20,374,929.99	.....
<i>Less:</i>				
Receipts from improvement and equipment fund .....	\$23,823,091.13	\$23,823,091.13	.....	.....
Appropriations from income and surplus prior to July 1, 1907, credited to this account .....	13,310,236.52	13,310,236.52	.....	.....
Total .....	<b>\$37,133,327.65</b>	<b>\$37,133,327.65</b>	.....	.....
701. Investment in road and equipment .....	<b>\$922,327,896.99</b>	<b>\$901,952,967.00</b>	<b>\$20,374,929.99</b>	.....
704. DEPOSITS IN LIEU OF MORTGAGED PROPERTY SOLD .....	\$827,555.59	\$91,085.28	\$736,470.31	.....
705. MISCELLANEOUS PHYSICAL PROPERTY .....	7,702,227.73	3,752,460.15	3,949,767.58	.....
Total .....	<b>\$8,529,783.32</b>	<b>\$3,843,545.43</b>	<b>\$4,686,237.89</b>	.....
706. Investments in affiliated companies:				
Stocks .....	\$20,363,886.91	\$20,218,054.94	\$145,831.97	.....
Bonds, notes, and equipment trust certificates .....	11,710,859.36	12,982,236.98	1,271,377.62	.....
Advances .....	19,527,877.86	17,630,370.41	1,897,507.45	.....
Total .....	<b>\$51,602,624.13</b>	<b>\$50,830,662.33</b>	<b>\$771,961.80</b>	.....
707. Investments in other companies:				
Stocks .....	\$81,160,708.06	\$79,157,148.70	\$2,003,559.36	.....
Bonds, notes, and equipment trust certificates .....	65,765,779.95	68,180,314.18	\$2,414,534.23	.....
Total .....	<b>\$146,926,488.01</b>	<b>\$147,337,462.88</b>	.....	<b>\$410,974.87</b>
UNITED STATES GOVERNMENT BONDS AND NOTES .....	<b>\$19,759,318.17</b>	<b>\$23,847,082.76</b>	.....	<b>\$4,087,764.59</b>
703. SINKING FUNDS .....	<b>\$100,000.00</b>	<b>\$278,948.29</b>	.....	<b>\$178,948.29</b>
Total Investments .....	<b>\$1,149,246,110.62</b>	<b>\$1,128,090,668.69</b>	<b>\$21,155,441.93</b>	.....
<b>Current Assets:</b>				
708. CASH .....	\$9,739,058.20	\$25,995,814.93	.....	<b>\$16,256,756.73</b>
710. TIME DRAFTS AND DEPOSITS .....	.....	400,000.00	.....	400,000.00
711. SPECIAL DEPOSITS .....	\$1,045.44	55,513.66	.....	4,468.22
712. LOANS AND BILLS RECEIVABLE .....	6,447.50	22,856.64	.....	16,409.14
713. TRAFFIC AND CAR SERVICE BALANCES RECEIVABLE .....	3,352,663.65	4,959,508.39	.....	1,606,844.74
714. NET BALANCE RECEIVABLE FROM AGENTS AND CONDUCTORS .....	1,024,846.24	1,285,580.73	.....	260,734.49
715. MISCELLANEOUS ACCOUNTS RECEIVABLE .....	4,940,042.27	4,334,928.83	\$605,113.44	.....
716. MATERIAL AND SUPPLIES .....	30,498,241.56	21,638,889.06	8,859,352.50	.....
717. INTEREST AND DIVIDENDS RECEIVABLE .....	963,756.92	1,038,554.43	74,797.51	.....
718. RENTS RECEIVABLE .....	114,433.17	126,997.21	12,564.04	.....
719. OTHER CURRENT ASSETS:				
Baltimore and Ohio Railroad Co. capital stock applicable to payment of extra dividend of 1914 .....	113,875.70	114,655.70	.....	780.00
Miscellaneous items .....	1,080.96	380.65	700.31	.....
Total Current Assets .....	<b>\$50,805,491.61</b>	<b>\$59,973,680.23</b>	.....	<b>\$9,168,188.62</b>
<b>Deferred Assets:</b>				
720. WORKING FUND ADVANCES .....	\$259,598.28	\$238,819.71	\$20,778.57	.....
722. OTHER DEFERRED ASSETS .....	3,947,751.53	4,050,653.25	\$102,901.72	.....
Total Deferred Assets .....	<b>\$4,207,349.81</b>	<b>\$4,289,472.96</b>	.....	<b>\$82,123.15</b>
<b>Unadjusted Debts:</b>				
723. RENTS AND INSURANCE PREMIUMS PAID IN ADVANCE .....	\$20,249.75	\$32,200.96	.....	<b>\$11,951.21</b>
725. DISCOUNT ON FUNDED DEBT .....	731,604.56	763,298.60	.....	31,694.04
727. OTHER UNADJUSTED DEBITS .....	1,232,321.67	1,463,089.15	.....	230,767.48
Total Unadjusted Debts .....	<b>\$1,984,175.98</b>	<b>\$2,258,588.71</b>	.....	<b>\$274,412.73</b>
<b>Grand Total</b> .....	<b>\$1,205,243,128.02</b>	<b>\$1,194,612,410.59</b>	<b>\$11,630,717.43</b>	.....

## Operating Results for Year 1937 Compared with Year 1936—Continued

TAXES—(Continued)	1937	1936	INCREASE	DECREASE	PER CENT
24. Federal capital stock .....	\$352,745.00	\$358,341.48	.....	\$5,596.48	1.6
25. Federal excise .....	35,792.47	1,801,373.69	.....	1,765,581.22	98.0
26. All other federal .....	13,203.68	21,753.76	.....	8,550.08	39.3
27. Total taxes .....	\$13,244,160.11	\$13,057,038.88	\$187,121.23	.....	1.4
28. Railway operating income .....	\$31,985,572.28	\$33,428,429.55	.....	\$1,442,857.27	4.3
29. Equipment rents (debit) .....	8,562,894.10	7,721,865.65	\$841,028.45	.....	10.9
30. Joint facility rents (debit) .....	536,417.95	635,937.32	.....	99,519.37	15.6
31. Net railway operating income .....	\$22,886,260.23	\$25,070,626.58	.....	\$2,184,366.35	8.7
Per cent—Operating expenses of operating revenues .....	72.09	70.05	2.04	.....	2.9
<b>FREIGHT TRAFFIC (Commercial Freight only)</b>					
Tons of revenue freight carried .....	28,609,938	26,720,428	1,889,510	.....	7.1
Ton-miles, revenue freight .....	13,297,243,583	12,522,299,230	774,944,353	.....	6.2
Average distance hauled per ton (miles) .....	464.78	468.64	.....	3.86	.8
Average revenue per ton-mile (cents) .....	.983	1.014	.....	.031	3.1
Average revenue per freight-train mile .....	\$5.67	*\$5.67	.....	.....	.....
<b>PASSENGER TRAFFIC (Excludes Motor Train, other than Streamlined Train)</b>					
Revenue passengers carried .....	2,052,571	1,880,651	171,920	.....	9.1
Revenue passengers carried one mile .....	1,072,827,716	907,324,454	165,503,262	.....	18.2
Average distance hauled per passenger (miles) .....	522.68	482.45	40.23	.....	8.3
Average passengers per passenger-train mile .....	80.02	*71.38	8.64	.....	12.1
Average revenue per passenger-mile (cents) .....	1.600	1.641	.....	.041	2.5
Average revenue per passenger-train mile, passengers only .....	\$1.28	*\$1.17	\$.11	.....	9.4
Average total revenue per passenger-train mile .....	\$1.72	*\$1.80	.....	\$.08	4.4

\* Restated.

## General Balance Sheet—Liabilities

	December 31, 1937	December 31, 1936	INCREASE	DECREASE
751. Capital Stock				
Common stock .....	\$222,302,500.00	\$222,302,500.00	.....	*\$2,000.00
Preferred stock .....	99,602,980.79	99,604,980.79	.....	.....
Total Capital Stock .....	\$321,905,480.79	\$321,907,480.79	.....	\$2,000.00
755. Funded Debt .....	354,963,010.00	346,091,800.00	\$8,871,210.00	.....
Total .....	\$676,868,490.79	\$667,999,280.79	\$8,869,210.00	.....
754. Grants in Aid of Construction .....	\$4,754,683.37	\$4,402,054.89	\$352,628.48	.....
757. Nonnegotiable Debt to Affiliated Companies .....	\$5,375,706.75	\$4,879,765.26	\$495,941.49	.....
Current Liabilities:				
759. TRAFFIC AND CAR SERVICE BALANCES PAYABLE .....	\$1,236,791.98	\$1,846,130.28	.....	\$609,338.30
760. AUDITED ACCOUNTS AND WAGES PAYABLE .....	9,588,005.63	10,161,345.67	.....	573,340.04
761. MISCELLANEOUS ACCOUNTS PAYABLE .....	804,399.26	1,967,165.59	.....	1,162,766.33
762. INTEREST MATURED UNPAID:				
Coupons matured, but not presented .....	84,168.31	98,715.61	.....	14,547.30
Coupons and interest on registered bonds, due first proximo .....	4,032,140.20	3,888,912.40	\$143,227.80	.....
763. DIVIDENDS MATURED UNPAID:				
Dividends due but uncalled for .....	117,034.46	115,588.79	1,445.67	.....
Extra dividend on common stock declared January 8, 1914, payable to stockholders of record March 2, 1914, unpaid .....	122,851.76	123,631.76	.....	780.00
Dividend on common stock payable third proximo .....	3,334,365.00	3,334,365.00	.....	.....
764. FUNDED DEBT MATURED UNPAID .....	98,175.00	2,254,725.00	.....	2,156,550.00
766. UNMATURED INTEREST ACCRUED .....	1,636,003.07	1,654,601.89	.....	18,598.82
767. UNMATURED RENTS ACCRUED .....	371,945.03	366,781.62	5,163.41	.....
768. OTHER CURRENT LIABILITIES .....	272,111.09	196,216.83	75,894.26	.....
Total Current Liabilities .....	\$21,697,990.79	\$26,008,180.44	.....	\$4,310,189.65
Deferred Liabilities:				
770. OTHER DEFERRED LIABILITIES .....	\$8,043,174.13	\$7,834,605.26	\$208,568.87	.....
771. TAX LIABILITY .....	7,776,109.00	8,651,247.57	.....	\$875,138.57
Total Deferred Liabilities .....	\$15,819,283.13	\$16,485,852.83	.....	\$666,569.70
Unadjusted Credits:				
772. PREMIUM ON FUNDED DEBT .....	\$98,668.87	.....	\$98,668.87	.....
773. INSURANCE RESERVE:				
Reserve for fire insurance .....	8,020,482.62	\$7,457,704.23	562,778.39	.....
776. RESERVE FOR DEPRECIATION .....	111,661,138.44	106,793,689.98	4,867,448.46	.....
778. OTHER UNADJUSTED CREDITS:				
Contingent interest .....	2,179,910.60	1,660,967.76	518,942.84	.....
Miscellaneous items .....	2,844,370.51	820,859.96	2,023,510.55	.....
Total Unadjusted Credits .....	\$124,804,571.04	\$116,733,221.93	\$8,071,349.11	.....
Total Liabilities .....	\$849,320,725.87	\$836,508,356.14	\$12,812,369.73	.....
Surplus:				
APPROPRIATED FOR ADDITIONS AND BETTERMENTS .....	\$30,733,178.01	\$30,652,543.59	\$80,634.42	.....
RESERVED FOR DEPRECIATION OF SECURITIES .....	34,972,570.88	34,972,570.88	.....	.....
FUNDED DEBT RETIRED THROUGH INCOME AND SURPLUS .....	667,788.66	536,828.66	130,960.00	.....
SINKING FUND RESERVES .....	100,000.00	278,948.29	.....	\$178,948.29
Total Appropriated Surplus .....	\$66,473,537.55	\$66,440,891.42	\$32,646.13	.....
784. Profit and Loss—Credit Balance .....	250,883,664.86	252,098,363.29	.....	\$1,214,698.43
Total Surplus .....	\$317,357,202.41	\$318,539,254.71	.....	\$1,182,052.30
Grand Total .....	\$39,565,199.74	\$39,564,799.74	\$400.00	.....
	\$1,206,243,128.02	\$1,194,612,410.59	\$11,630,717.43	.....

\* Represents 20 shares of The St. J. and G. I. Ry. Co. First Preferred Stock purchased by Union Pacific Railroad Co.

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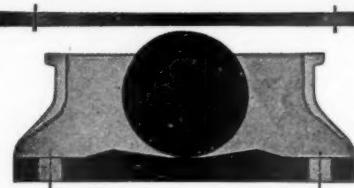
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